

CITY OF MARSHFIELD 2016 STREET AND UTILITY CONSTRUCTION PROJECTS

- A. Sidewalk Reconstruction - Oak Avenue (Depot Street to Cleveland Street)
Plan No. 3590 Project No. 612865

- B. Street Reconstruction - Alley (Chestnut / Central – 5th / 6th)
Plan No. 3598 Project No. 312017

- C. Street Reconstruction - 1st Street & Cedar Avenue - Intersection
Plan No. 3599 Project No. 312238

- D. Street Reconstruction - 2nd Street (Chestnut Avenue to Central Avenue)
Plan No. 3600 Project No. 312219

- E. Street Reconstruction - 2nd Street (Central Avenue to Maple Avenue)
Plan No. 3601 Project No. 312219, 312220, 352221 & 316774

- F. Colored Concrete Maintenance and Repairs
Central Avenue (17th Street to 2nd Street)
Chestnut Avenue (7th Street to 1st Street)
Plan No. ' *%\$ Project No. 312219



MARSHFIELD

• The City in the Center •

Contract 2016-01

City Contact:
Thomas R. Turchi, P.E.
City Engineer
City of Marshfield
630 S. Central Ave.
Suite 622
Marshfield, WI 54449
Email: tom@ci.marshfield.wi.us
Web Site: www.ci.marshfield.wi.us
Phone: (715) 486-2034

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SPECIAL PROVISIONS FOR CONTRACT 2016-01

2016 STREET & UTILITY CONSTRUCTION PROJECTS

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Plan No. 3610 Project No. 312219

**CITY OF MARSHFIELD
WISCONSIN
MARCH, 2016**

**CITY OF MARSHFIELD
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
630 SOUTH CENTRAL AVENUE
SUITE 622
MARSHFIELD, WISCONSIN 54449
PHONE: 715.486.2034
FAX: 715.384.7631
[HTTP://CI.MARSHFIELD.WI.US](http://ci.marshfield.wi.us)**

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OFFICIAL NOTICE TO BIDDERS**CITY OF MARSHFIELD****2016 STREET AND UTILITY CONSTRUCTION PROJECTS**

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- D. Street Reconstruction - 2nd Street (Chestnut Avenue to Central Avenue), Plan No. 3600, Project No. 312219
- E. Street Reconstruction - 2nd Street (Central Avenue to Maple Avenue), Plan No. 3601, Project No. 312219, 312220, 352221 & 316774
- F. Colored Concrete Maintenance and Repairs, Central Avenue (17th Street to 2nd Street), Chestnut Avenue (7th Street to 1st Street), Plan No. 3610, Project No. 312219

CONTRACT 2016-01

Sealed bids, containing proposals, will be received until 4:00 PM; Monday, March 28th, 2016 in the Office of the City Engineer, for the construction of the projects listed herein. Said bid proposals will be opened and publicly read in the lobby on the 6th Floor of City Hall Plaza, 630 South Central Avenue at 4:05 PM on Monday, March 28th, 2016.

Proposals will then be reviewed, tabulated, and submitted to the Board of Public Works at a regular meeting on Monday, April 4th, 2016 for consideration and recommendation to the Common Council at their regular meeting on Tuesday, April 12th, 2016 for Award of Contract.

ESTIMATE OF PRINCIPAL ITEMS

1. 8" Doweled Concrete Pavement	400 Square Yards
2. Concrete Curb and Gutter	700 Linear Feet
3. Concrete Sidewalk 4" & 6"	15,000 Square Feet
4. Crushed Aggregate Base Course	600 Cubic Yards
5. Select Crushed	900 Cubic Yards
6. 8" PVC Sanitary Sewer	350 Linear Feet

No Proposal will be considered unless each is presented under sealed cover and is accompanied by a cashier's check or bid bond satisfactory to the Board of Public Works in an amount equal to five percent (5%) of the total amount of the Proposal and made out in the name of the City of Marshfield, Wisconsin, as a guarantee that, if the bid is accepted, the Bidder will execute and file the proper Contract and Performance Bond within ten (10) days after award of the bid. Upon the execution of the Contract by the City, the check will be returned.

No Proposal may be withdrawn by the Bidder for a period of thirty (30) days following the date of the bid opening, within which time the Contract will be awarded by the Common Council.

Complete digital project bidding documents are available at www.questcdn.com. You may download the digital plan documents for \$ 50.00 by inputting Quest project #4288001 on the website's Project Search page. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. Bidding documents may be examined at the offices of City of Marshfield, Engineering Division, 630 S Central Avenue, Marshfield, WI 54449.

An optional paper set of project documents (Plans and Specifications), as prepared by the Engineering Division, are available from the Office of the City Engineer for a nonrefundable price of \$ 200.00 per set which includes applicable sales tax and shipping. Please make your check to payable to City of Marshfield and send it to Suite 622, 630 South Central Avenue, Marshfield, WI 54449. Please contact us at (715) 486-2034 if you have any questions.

An updated plan holders list will be available on the QuestCDN website.

The City of Marshfield, Wisconsin reserves the right to accept or reject any or all proposals, including, but not limited to, any or all proposals which are not responsive, to waive informalities in the bidding procedure and to award the Contract to the Bidder whom, in the opinion of said City, will be most advantageous to said City.

Letting of this Contract is subject to applicable provisions of the Wisconsin Statutes, including 66.0903 relative to minimum wage rates.

Prequalification of bidders for this type of work will be required by the Board of Public Works. A questionnaire form will be provided for Contractors intending to bid the work. This form is available on the City's website at http://ci.marshfield.wi.us/departments/public_works/engineering/project_bidding.php. This form shall be mailed to the City of Marshfield Engineering Division.

ALL CONTRACTORS WHO INTEND TO BID THE CONSTRUCTION, AND ARE NOT PREQUALIFIED, MUST SUBMIT AN ANNUAL PREQUALIFICATION STATEMENT ON FORMS PROVIDED BY THE CITY, WHICH WILL DETERMINE THEIR QUALIFICATION FOR THE PROPOSED CONSTRUCTION. THESE STATEMENTS MUST BE RETURNED NO LATER **THAN 5:00 PM, Monday, March 21st, 2016**. FAILURE TO COMPLY WITH THE ABOVE SHALL RESULT IN THE REJECTION OF THE PROPOSAL SUBMITTED BY THE BIDDER.

BOARD OF PUBLIC WORKS
MARSHFIELD, WISCONSIN
Daniel G. Knoeck, Secretary

PUBLISH: News Herald – February 20th & February 27th, 2016 – LEGAL
Hub City Times – February 27th, 2016 - LEGAL

SPECIAL INSTRUCTIONS TO PROSPECTIVE BIDDERS**CONTRACT 2016-01****2016 STREET & UTILITIES CONSTRUCTION**

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Plan No. 3610 Project No. 312219

Section 66.09 Wisconsin Statutes permits the prequalification of all Contractors interested in submitting a bid on a municipal project.

Prequalification of bidders for this type of work is required by the Board of Public Works. All Contractors that intend to bid the construction must submit an Annual Prequalification Statement on forms provided by the City which will determine their qualification for the proposed construction. These statements must be returned no later than 5:00 PM, Monday, March 14th, 2016. Failure to comply with the above shall result in the rejection of the proposal submitted by the bidder.

BOARD OF PUBLIC WORKS
MARSHFIELD, WISCONSIN
Daniel G. Knoeck, Secretary

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CITY OF MARSHFIELD CONTRACT 2016-01

STREET & UTILITIES CONSTRUCTION

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DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS MINIMUM WAGE RATES

In accordance with the requirements of Wisconsin Statute 66.0903, the Contractor shall pay his employees no less than the Minimum Wage Rates indicated on the attached 'Prevailing Wage Rate Determination' for all work performed under this Contract.

Prior to receiving final payment, the Contractor must file an affidavit with the City of Marshfield, which states that all of the provisions and requirements of s. 66.0903(9), Stats., have been complied with and that such Contractor has received similar evidence of compliance from all of its agents and subcontractors. The final payment will not be issued until such an affidavit is filed in proper form and order.

NOTE: THIS PROJECT IS SUBJECT TO PREVAILING WAGE RATES

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State of Wisconsin Department of Workforce Development Equal Rights Division	<h2>DEPARTMENTAL ORDER</h2>
ISSUE DATE: 2/3/2016	
PROJECT:	
CONTRACT 2016-01 MARSHFIELD CITY, WOOD COUNTY, WI Determination No. 201600366 [Owner Project No. 312219, 312017, 612865 & 312238]	
PROJECT OWNER:	REQUESTER:
THOMAS R TURCHI PE , CITY ENGINEER CITY OF MARSHFIELD P O BOX 727 MARSHFIELD, WI 54449	THOMAS R TURCHI PE , CITY ENGINEER CITY OF MARSHFIELD P O BOX 727 MARSHFIELD, WI 54449
ADDITIONAL CONTACT:	
	NOTE: The Requester must provide a copy of this Project Determination and enclosures to the Project Owner and Additional Contact.
<p>The department received an application for prevailing wage rate determination for the above-captioned project. The department conducted a survey to determine the prevailing wage rate for the trade(s) or occupation(s) needed to complete the project. The survey's findings appear in the attached project determination.</p> <p>If you believe that the wage rate for any trade or occupation does not accurately reflect the prevailing wage rate in the city, village or town where the project is located, you may ask the department to conduct an administrative review of such wage rate. You must submit this request in writing within 30 days from the date indicated above. Additionally, your request must include wage rate information from at least three similar projects in the city, village or town where the proposed project is located and on which some work has been performed by the contested trade(s) during the current survey period and was previously considered by the department in issuing the attached determination. See DWD 290.10 of the Wisconsin Administrative Code and either s. 66.0903(3)(br), Stats., or s. 103.49(3)(c), Stats., for a complete explanation of the administrative review process.</p> <p>Enclosures</p>	
<p>It is hereby ordered that the prevailing wage rates set forth in the attached project determination shall only be applicable to the above referenced project. This order is a FINAL ORDER of the department unless a timely request for an administrative review is filed with the department.</p> <p>ISSUED BY:</p> <p style="text-align: center;"> Equal Rights Division Labor Standards Bureau Construction Wage Standards Section P.O. Box 8928, Madison, WI 53708-8928 (608)266-6861 </p> <p style="text-align: center;"> Web Site: http://dwd.wisconsin.gov/er/ </p>	

PREVAILING WAGE RATE DETERMINATION

Issued by the State of Wisconsin
 Department of Workforce Development
 Pursuant to s. 66.0903, Wis. Stats.
 Issued On: 2/3/2016

DETERMINATION NUMBER: 201600366

EXPIRATION DATE: Prime Contracts MUST Be Awarded or Negotiated On Or Before 12/31/2016. If NOT, You MUST Reapply.

PROJECT NAME: CONTRACT 2016-01
 PROJECT NO: 312219, 312017, 612865 & 312238

PROJECT LOCATION: MARSHFIELD CITY, WOOD COUNTY, WI

CONTRACTING AGENCY: CITY OF MARSHFIELD

CLASSIFICATION:	Contractors are responsible for correctly classifying their workers. Either call the Department of Workforce Development (DWD) with trade or classification questions or consult DWD's Dictionary of Occupational Classifications & Work Descriptions on the DWD website at: dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm .
OVERTIME:	<p>Time and one-half must be paid for all hours worked:</p> <ul style="list-style-type: none"> - over 10 hours per day on prevailing wage projects - over 40 hours per calendar week - Saturday and Sunday - on all of the following holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; - The day before if January 1, July 4 or December 25 falls on a Saturday; - The day following if January 1, July 4 or December 25 falls on a Sunday. <p>Apply the time and one-half overtime calculation to whichever is higher between the Hourly Basic Rate listed on this project determination or the employee's regular hourly rate of pay. Add any applicable Premium or DOT Premium to the Hourly Basic Rate before calculating overtime.</p> <p>A DOT Premium (discussed below) may supersede this time and one-half requirement.</p>
FUTURE INCREASE:	When a specific trade or occupation requires a future increase, you MUST add the full hourly increase to the "TOTAL" on the effective date(s) indicated for the specific trade or occupation.
PREMIUM PAY:	If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.
DOT PREMIUM:	This premium only applies to highway and bridge projects owned by the Wisconsin Department of Transportation and to the project type heading "Airport Pavement or State Highway Construction." DO NOT apply the premium calculation under any other project type on this determination.
APPRENTICES:	Pay apprentices a percentage of the applicable journey person's hourly basic rate of pay and hourly fringe benefit contributions specified in this determination. Obtain the appropriate percentage from each apprentice's contract or indenture.
SUBJOURNEY:	Subjourney wage rates may be available for some of the trades or occupations indicated below with the exception of laborers, truck drivers and heavy equipment operators. Any employer interested in using a subjourney classification on this project MUST complete Form ERD-10880 and request the applicable wage rate from the Department of Workforce Development PRIOR to using the subjourney worker on this project.

This document **MUST BE POSTED** by the **CONTRACTING AGENCY** in at least one conspicuous and easily accessible place **on the site of the project**. A local governmental unit may post this document at the place normally used to post public notices if there is no common site on the project. This document **MUST** remain posted during the entire time any worker is employed on the project and **MUST** be physically incorporated into the specifications and all contracts and subcontracts. If you have any questions, please write to the Equal Rights Division, Labor Standards Bureau, P.O. Box 8928, Madison, Wisconsin 53708 or call (608) 266-6861.

The following statutory provisions apply to local governmental unit projects of public works and are set forth below pursuant to the requirements of s. 66.0903(8), Stats.

s. 66.0903 (1) (f) & s. 103.49 (1) (c) "PREVAILING HOURS OF LABOR" for any trade or occupation in any area means 10 hours per day and 40 hours per week and may not include any hours worked on a Saturday or Sunday or on any of the following holidays:

1. January 1.
2. The last Monday in May.
3. July 4.
4. The first Monday in September.
5. The 4th Thursday in November.
6. December 25.
7. The day before if January 1, July 4 or December 25 falls on a Saturday.
8. The day following if January 1, July 4 or December 25 falls on a Sunday.

s. 66.0903 (10) RECORDS; INSPECTION; ENFORCEMENT.

(a) Each contractor, subcontractor, or contractor's or subcontractor's agent performing work on a project of public works that is subject to this section shall keep full and accurate records clearly indicating the name and trade or occupation of every person performing the work described in sub. (4) and an accurate record of the number of hours worked by each of those persons and the actual wages paid for the hours worked.

s. 66.0903 (11) LIABILITY AND PENALTIES.

(a) 1. Any contractor, subcontractor, or contractor's or subcontractor's agent who fails to pay the prevailing wage rate determined by the department under sub. (3) or who pays less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor is liable to any affected employee in the amount of his or her unpaid wages or his or her unpaid overtime compensation and in an additional amount as liquidated damages as provided under subd. 2., 3., whichever is applicable.

2. If the department determines upon inspection under sub. (10) (b) or (c) that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the department shall order the contractor to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages within a period specified by the department in the order.

3. In addition to or in lieu of recovering the liability specified in subd. 1. as provided in subd. 2., any employee for and in behalf of that employee and other employees similarly situated may commence an action to recover that liability in any court of competent jurisdiction. If the court finds that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the court shall order the contractor, subcontractor, or agent to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages.

5. No employee may be a party plaintiff to an action under subd. 3. unless the employee consents in writing to become a party and the consent is filed in the court in which the action is brought. Notwithstanding s. 814.04 (1), the court shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees and costs to be paid by the defendant.

BUILDING OR HEAVY CONSTRUCTION

Includes sheltered enclosures with walk-in access for the purpose of housing persons, employees, machinery, equipment or supplies and non-sheltered work such as canals, dams, dikes, reservoirs, storage tanks, etc. A sheltered enclosure need not be "habitable" in order to be considered a building. The installation of machinery and/or equipment, both above and below grade level, does not change a project's character as a building. On-site grading, utility work and landscaping are included within this definition. Residential buildings of four (4) stories or less, agricultural buildings, parking lots and driveways are NOT included within this definition.

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
101	Acoustic Ceiling Tile Installer	32.72	17.67	50.39
102	Boilermaker	33.35	28.29	61.64
103	Bricklayer, Blocklayer or Stonemason Future Increase(s): Add \$1.45 on 06/06/2016 Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.40	18.80	51.20
104	Cabinet Installer	23.00	1.33	24.33
105	Carpenter Future Increase(s): Add \$1.42/hr on 6/1/2016. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.02	17.12	50.14
106	Carpet Layer or Soft Floor Coverer Future Increase(s): Add \$1.42/hr on 6/1/2016.	33.02	17.12	50.14
107	Cement Finisher	32.15	17.92	50.07
108	Drywall Taper or Finisher	32.72	8.84	41.56
109	Electrician	29.20	17.36	46.56
110	Elevator Constructor	46.05	27.09	73.14
111	Fence Erector	19.27	6.84	26.11
112	Fire Sprinkler Fitter	38.28	18.81	57.09
113	Glazier	29.35	18.10	47.45
114	Heat or Frost Insulator	30.34	21.86	52.20
115	Insulator (Batt or Blown)	23.62	11.55	35.17
116	Ironworker	32.50	20.58	53.08

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
117	Lather	32.72	16.00	48.72
118	Line Constructor (Electrical)	40.81	19.12	59.93
119	Marble Finisher	25.72	18.54	44.26
120	Marble Mason	32.15	17.66	49.81
121	Metal Building Erector	18.32	8.62	26.94
122	Millwright Future Increase(s): Add \$1.47/hr on 6/1/2016.	34.79	17.17	51.96
123	Overhead Door Installer	17.50	6.39	23.89
124	Painter	17.00	0.00	17.00
125	Pavement Marking Operator	30.00	18.81	48.81
126	Piledriver Future Increase(s): Add \$1.44/hr on 6/1/2016. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.56	17.12	50.68
127	Pipeline Fuser or Welder (Gas or Utility)	35.55	16.12	51.67
129	Plasterer Future Increase(s): Add \$1.45 on 06/06/2016	32.40	18.80	51.20
130	Plumber	36.75	16.32	53.07
132	Refrigeration Mechanic	36.75	16.32	53.07
133	Roofer or Waterproofing	23.00	5.50	28.50
134	Sheet Metal Worker	28.10	23.50	51.60
135	Steamfitter	36.75	16.32	53.07
137	Teledata Technician or Installer	22.50	12.74	35.24
138	Temperature Control Installer	33.86	15.23	49.09
139	Terrazzo Finisher	25.72	18.54	44.26
140	Terrazzo Mechanic Future Increase(s): Add \$1.45 on 06/06/2016	31.59	19.60	51.19
141	Tile Finisher	30.00	0.00	30.00
142	Tile Setter Future Increase(s): Add \$1.45/hr on 6/06/2016.	31.59	19.61	51.20

Determination No. 201600366

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Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
143	Tuckpointer, Caulker or Cleaner Future Increase(s): Add \$1.45 on 06/06/2016 Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.40	18.80	51.20
144	Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74
146	Well Driller or Pump Installer Future Increase(s): Add \$1/hr on 6/1/2016; Add \$1/hr on 6/1/2017.	25.32	16.40	41.72
147	Siding Installer	18.00	9.53	27.53
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	39.57	25.80	65.37
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	15.52	48.17
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.55	40.08
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	25.00	12.55	37.55

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	25.68	18.96	44.64
203	Three or More Axle	18.00	5.21	23.21
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	25.78	18.96	44.74
205	Pavement Marking Vehicle	18.00	5.21	23.21
207	Truck Mechanic	18.00	5.21	23.21

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer Future Increase(s): Add \$1.25/hr eff. 06/06/2016 Premium Increase(s): Add \$1.00/hr for certified welder and pipelayer; Add \$.25/hr for mason tender	25.06	15.63	40.69
302	Asbestos Abatement Worker	25.02	15.63	40.65
303	Landscaper	10.00	0.00	10.00
310	Gas or Utility Pipeline Laborer (Other Than Sewer and Water)	21.14	14.65	35.79
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	12.00	0.00	12.00
314	Railroad Track Laborer	15.00	4.83	19.83
315	Final Construction Clean-Up Worker	29.01	17.39	46.40

**HEAVY EQUIPMENT OPERATORS
SITE PREPARATION, UTILITY OR LANDSCAPING WORK ONLY**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
501	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Milling Machine; Boring Machine (Directional, Horizontal or Vertical); Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Backhoe (Track Type) Having a Mfgr's Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Crane, Shovel, Dragline, Clamshells; Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Grader or Motor Patrol; Master Mechanic; Mechanic or Welder; Robotic Tool Carrier (With or Without Attachments); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Tractor (Scraper, Dozer, Pusher, Loader); Trencher (Wheel Type or Chain Type Having Over 8 Inch Bucket).	36.67	16.96	53.63
502	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Environmental Burner; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Jeep Digger; Screed (Milling Machine); Skid Rig; Straddle Carrier or Travel Lift; Stump Chipper; Trencher (Wheel Type or Chain Type Having 8 Inch Bucket & Under). Future Increase(s): Add \$1.60/hr on 6/3/2016.	34.69	20.38	55.07

Fringe Benefits Must Be Paid On All Hours Worked				
CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
503	Air Compressor (&/or 400 CFM or Over); Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Greaser; High Pressure Utility Locating Machine (Daylighting Machine); Mulcher; Oiler; Post Hole Digger or Driver; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.60/hr on 6/3/2016.	34.69	20.38	55.07
504	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
505	Work Performed on the Great Lakes Including Crane or Backhoe Operator; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder; 70 Ton & Over Tug Operator. Future Increase(s): Add \$1.25/hr on 1/1/2017. Premium Increase(s): Add \$.50/hr for Friction Crane, Lattice Boom or Crane Certification (CCO).	44.05	23.24	67.29
506	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery. Future Increase(s): Add \$1.25/hr on 1/1/2017.	39.20	23.09	62.29
507	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	36.72	21.15	57.87

**HEAVY EQUIPMENT OPERATORS
EXCLUDING SITE PREPARATION, UTILITY, PAVING LANDSCAPING WORK**

Fringe Benefits Must Be Paid On All Hours Worked				
CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
508	Boring Machine (Directional); Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Future Increase(s): Add \$1.60/hr on 6/3/2016. Premium Increase(s):	37.67	20.38	58.05

Fringe Benefits Must Be Paid On All Hours Worked

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
	Add \$.50/hr for >200 Ton; Add \$1/hr at 300 Ton; Add \$1.50/hr at 400 Ton; Add \$2/hr at 500 Ton & Over.			
509	Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Boring Machine (Horizontal or Vertical); Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Pile Driver; Versi Lifts, Tri-Lifts & Gantrys (20,000 Lbs. & Over). Future Increase(s): Add \$1.60/hr on 6/3/2016. Premium Increase(s): Add \$.25/hr for all >45 Ton lifting capacity cranes.	36.42	20.38	56.80
510	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Dredge (NOT Performing Work on the Great Lakes); Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Hydro-Blaster (10,000 PSI or Over); Milling Machine; Skid Rig; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.60/hr on 6/3/2016.	34.69	20.38	55.07
511	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Environmental Burner; Gantrys (Under 20,000 Lbs.); Grader or Motor Patrol; High Pressure Utility Locating Machine (Daylighting Machine); Manhoist; Material or Stack Hoist; Mechanic or Welder; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tining or Curing Machine; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket). Future Increase(s): Add \$1.60/hr on 6/3/2016.	34.69	20.38	55.07

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Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
512	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Grout Pump; Hoist (Tugger, Automatic); Industrial Locomotives; Jeep Digger; Lift Slab Machine; Mulcher; Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames. Future Increase(s): Add \$1.60/hr on 6/3/2016.	32.62	20.38	53.00
513	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Boatmen (NOT Performing Work on the Great Lakes); Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Elevator; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Forklift; Generator (&/or 150 KW or Over); Greaser; Heaters (Mechanical); Loading Machine (Conveyor); Oiler; Post Hole Digger or Driver; Prestress Machine; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.60/hr on 6/3/2016.	31.99	20.38	52.37
514	Gas or Utility Pipeline, Except Sewer & Water (Primary Equipment). Future Increase(s): Add \$1/hr on 5/30/2016.	37.04	22.44	59.48
515	Gas or Utility Pipeline, Except Sewer & Water (Secondary Equipment).	33.82	20.30	54.12
516	Fiber Optic Cable Equipment	23.00	0.00	23.00

SEWER, WATER OR TUNNEL CONSTRUCTION
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Includes those projects that primarily involve public sewer or water distribution, transmission or collection systems and related tunnel work (excluding buildings).

SKILLED TRADES

CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	32.15	17.66	49.81
105	Carpenter	32.72	16.00	48.72
107	Cement Finisher Future Increase(s): Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	35.97	17.85	53.82
109	Electrician Future Increase(s): Add \$1.60 on 6/1/16; Add \$1.70 on 6/1/17 Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.13	23.19	58.32
111	Fence Erector	19.27	6.84	26.11
116	Ironworker	32.50	20.58	53.08
118	Line Constructor (Electrical)	40.81	19.12	59.93
125	Pavement Marking Operator	30.00	18.81	48.81
126	Piledriver	33.24	16.00	49.24
130	Plumber Future Increase(s): Add \$1.50 on 6/1/16	39.95	19.45	59.40
135	Steamfitter	35.55	16.12	51.67
137	Teledata Technician or Installer	22.50	12.74	35.24
143	Tuckpointer, Caulker or Cleaner	32.15	17.66	49.81
144	Underwater Diver (Except on Great Lakes)	31.00	20.43	51.43
146	Well Driller or Pump Installer Future Increase(s): Add \$1/hr on 6/1/2016; Add \$1/hr on 6/1/2017.	25.32	16.40	41.72

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Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	36.73	15.92	52.65
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	15.52	48.17
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.55	40.08
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.97	34.72

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	19.00	0.00	19.00
203	Three or More Axle	19.00	0.00	19.00
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	33.69	19.78	53.47
205	Pavement Marking Vehicle	19.00	0.00	19.00
207	Truck Mechanic	19.00	0.00	19.00

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer	26.09	14.76	40.85
303	Landscaper	41.00	0.00	41.00
304	Flagperson or Traffic Control Person	19.31	10.45	29.76
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	12.00	0.00	12.00
314	Railroad Track Laborer	15.00	4.83	19.83

**HEAVY EQUIPMENT OPERATORS
SEWER, WATER OR TUNNEL WORK**

Fringe Benefits Must Be Paid On All Hours Worked

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
521	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Master Mechanic; Pile Driver. Premium Increase(s): Add \$.25/hr for operating tower crane.	38.09	20.80	58.89
522	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Spreader & Distributor; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Dredge (NOT Performing Work on the Great Lakes); Milling Machine; Skid Rig; Telehandler; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.60/hr on 6/3/2016.	35.22	20.38	55.60
523	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Boring Machine (Horizontal or Vertical); Bulldozer or Endloader (Over 40 hp); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Manhoist; Material or Stack Hoist; Mechanic or Welder; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket). Future Increase(s): Add \$1.60/hr on 6/3/2016.	34.69	20.38	55.07

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
524	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Environmental Burner; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Hoist (Tugger, Automatic); Grout Pump; Jeep Digger; Lift Slab Machine; Mulcher; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Tining or Curing Machine; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames.	33.69	21.75	55.44
525	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Loading Machine (Conveyor); Post Hole Digger or Driver; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.19	22.06	52.25
526	Boiler (Temporary Heat); Forklift; Greaser; Oiler.	30.99	19.78	50.77
527	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
528	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	41.65	21.71	63.36
529	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	22.24	22.79	45.03
530	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under), Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	36.72	21.15	57.87

LOCAL STREET OR MISCELLANEOUS PAVING CONSTRUCTION
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Includes roads, streets, alleys, trails, bridges, paths, racetracks, parking lots and driveways (except residential or agricultural), public sidewalks or other similar projects (excluding projects awarded by the Wisconsin Department of Transportation).

SKILLED TRADES

CODE	TRADE OR OCCUPATION	Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		
		HOURLY BASIC RATE OF PAY \$	HOURLY FRINGE BENEFITS \$	TOTAL \$
103	Bricklayer, Blocklayer or Stonemason	32.15	17.66	49.81
105	Carpenter Future Increase(s): Add \$1.42/hr on 6/1/2016. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.02	17.12	50.14
107	Cement Finisher Future Increase(s): Add \$1.50 on 05/30/2016;	27.36	20.44	47.80
109	Electrician	34.82	20.39	55.21
111	Fence Erector	19.27	6.84	26.11
116	Ironworker	32.50	20.58	53.08
118	Line Constructor (Electrical)	40.81	19.12	59.93
124	Painter	17.00	0.00	17.00
125	Pavement Marking Operator	30.00	18.81	48.81
126	Piledriver Future Increase(s): Add \$1.44/hr on 6/1/2016. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.56	17.12	50.68
133	Rofer or Waterproofor	23.00	5.50	28.50
137	Teledata Technician or Installer	22.50	12.74	35.24
143	Tuckpointer, Caulker or Cleaner	32.15	17.66	49.81
144	Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	36.73	15.92	52.65
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	15.52	48.17
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28

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Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.55	40.08
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.97	34.72

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	25.28	18.31	43.59
203	Three or More Axle Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	25.78	18.96	44.74
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.60/hr on 6/3/2016.	34.69	20.38	55.07
205	Pavement Marking Vehicle	25.28	18.31	43.59
206	Shadow or Pilot Vehicle	25.28	18.31	43.59
207	Truck Mechanic	25.28	18.31	43.59

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer	19.31	16.35	35.66
303	Landscaper Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	30.67	15.65	46.32
304	Flagperson or Traffic Control Person	19.31	10.45	29.76
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	12.00	0.00	12.00

314	Railroad Track Laborer	15.00	4.83	19.83
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**HEAVY EQUIPMENT OPERATORS
CONCRETE PAVEMENT OR BRIDGE WORK**

Fringe Benefits Must Be Paid On All Hours Worked

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
541	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Future Increase(s): Add \$1.60/hr on 6/3/2016. Premium Increase(s): Add \$.50/hr for >200 Ton; Add \$1/hr at 300 Ton; Add \$1.50/hr at 400 Ton; Add \$2/hr at 500 Ton & Over.	37.67	20.38	58.05
542	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Crane, Tower Crane Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsin.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx .	37.77	21.85	59.62

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
543	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.	22.24	22.79	45.03
544	Backfiller; Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsin.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx .	37.27	21.85	59.12
545	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	31.62	19.78	51.40
546	Fiber Optic Cable Equipment.	23.00	0.00	23.00

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
547	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
548	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder. Future Increase(s): Add \$1.25/hr on 1/1/2017. Premium Increase(s): Add \$.50/hr for Friction Crane, Lattice Boom or Crane Certification (CCO).	44.05	23.24	67.29
549	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or more); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	22.24	22.79	45.03
550	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	36.72	21.15	57.87

**HEAVY EQUIPMENT OPERATORS
ASPHALT PAVEMENT OR OTHER WORK**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
551	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads and/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.	36.67	19.78	56.45

Fringe Benefits Must Be Paid On All Hours Worked

CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
552	<p>Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.</p> <p>Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsin.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx.</p>	37.77	21.85	59.62
553	<p>Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Laser/Screed; Concrete Slipform Placer Curb & Gutter Machine; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.</p> <p>Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p>	30.20	20.65	50.85

Fringe Benefits Must Be Paid On All Hours Worked

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
554	Backfiller; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self-Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.	30.20	20.65	50.85
555	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.60/hr on 6/3/2016.	32.62	20.38	53.00
556	Fiber Optic Cable Equipment.	23.00	0.00	23.00

***** END OF RATES *****

**Department of Workforce Development
 Equal Rights Division**
 P.O. Box 8928
 Madison, WI 53708-8928
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 TTY: (608) 264-8752



**Scott Walker, Governor
 Reginald J. Newson, Secretary**

The documents following the Prevailing Wage Rate Determination consist of twenty pages (including this one) of various forms/documents that will be used throughout the completion of the project. This prevailing wage rate determination and its underlying legal requirements outlined in the attached documents apply for the life of this project even though work on the project continues into 2017 or beyond. The chart below lists the form number, form/document name, the party who uses the document, and the document's number of pages. If you have any questions regarding these forms please call the Prevailing Wage Office at (608)266-6861.

ERD Form Number	Form Name	Party Who Uses the Form	Pages
	July 2015 description of recent changes to Wisconsin's prevailing wage laws resulting from enactment of the 2015-17 State Budget Bill.		1
	Prevailing Wage - Public Entity Project Owners	Explanation of project owner responsibilities	2
16056	Post the White Sheet	Contracting agency	1
10908	Consolidated List of Debarred Contractors	Any party contracting someone to complete work on a prevailing wage project	4
	Prevailing Wage – Contractors	Explanation of contractor responsibilities	2
7777	Disclosure of Ownership	Contractors that meet the criteria set out in (3)(A)&(B) of the form	1
5724	Prime Contractor Affidavit of Compliance	Prime contractor files with contracting agency upon completion of the work before receiving final payment	2
10584	Agent or Subcontractor Affidavit of Compliance	Subcontractors file with their awarding contractor upon completion of their work on the project before receiving final payment	2
10880	Request to Employ Subjourneyperson	Contractors wishing to employ a subjourneyperson(s)	1
	Additional General Prevailing Wage Law Information	General information for public entity or any other interested party	3

12/22/2015

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THE 2015-17 BUDGET BILL MADE SIGNIFICANT CHANGES TO WISCONSIN'S PREVAILING WAGE LAWS. HOWEVER, THOSE CHANGES DO NOT GO INTO EFFECT UNTIL JANUARY 1, 2017.

During calendar year 2016, DWD will continue to enforce prevailing wage laws for local governmental unit and state agency public works projects under current prevailing wage laws.

2015 Wisconsin Act 55 (the budget bill) repealed the state prevailing wage law for **local governmental units** such as villages, towns, cities, school districts, or sewerage districts effective January 1, 2017. However, if a local governmental unit:

- issues a Request for Bids before January 1, 2017, for a project of public works that is subject to bidding or,
- enters into a contract before January 1, 2017, for a project of public works that is not subject to bidding,

then those public works projects are subject to the current prevailing wage law (§66.0903, Wis. Stats.) through the life of the project. Projects of public works with prevailing wage project determinations issued prior to 2017 continue to be subject to the current prevailing wage law through the life of the project even though the project may have work going on in 2017 or subsequent years.

Contractors working on local governmental unit projects with prevailing wage rate determinations must continue to pay employees the appropriate prevailing wage and maintain required prevailing wage payroll records. For instance, if a contractor is working in 2018 on a public works project with a project determination issued prior to 2017, then the contractor is required to comply with the "old" prevailing wage rate law (§66.0903, Wis. Stats.). After January 1, 2017, DWD will continue to enforce prevailing wage requirements for projects with DWD prevailing wage determinations issued under the "old" prevailing wage laws (§§ 66.0903 & 103.49, Wis. Stats.).

For new public works projects starting on January 1, 2017, state prevailing wage law will only apply to **state agency** and **state highway** projects. Prevailing wage rates applicable to state agencies will be those issued by the U.S. Department of Labor under the Davis-Bacon Act, 40 U.S.C. 3142. The Wisconsin Department of Administration will enforce the new state agency prevailing wage law (§16.856, Wis. Stats.) and the Wisconsin Department of Transportation will continue to enforce prevailing wage on state highway projects (under a law renumbered as §84.062, Wis. Stats.).

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PREVAILING WAGE – Public Entity Project Owners

Any public works project that has a total estimated project cost that equals or exceeds single-trade or multiple-trade project thresholds requires a prevailing wage rate determination issued by the Department of Workforce Development (DWD). Public works include erecting, constructing, remodeling, repairing, demolishing, alterations, painting and decorating projects for a local governmental unit or state agency. State law excludes minor service or maintenance work, warranty work, or work under a supply-and-installation contract. There is a statutory definition for most of these exclusions. The prevailing wage law that applies to local governmental units is §66.0903, Wis. Stats. The prevailing wage law that applies to state agencies is §103.49, Wis. Stats. The applicable administrative rules for all public entities are DWD 290 and DWD 294, Wis. Adm. Code.

Thresholds

- A "single-trade project of public works" means a project in which a single trade accounts for 85% or more of the total labor cost of the project. The single trade threshold is \$48,000.
- A "multiple-trade project of public works" means a project in which no single trade accounts for 85% or more of the total labor cost of the project.
- (a) The multiple-trade threshold is \$100,000, unless a municipality falls under the description in (b).
 - (b) The multiple-trade threshold of \$234,000 applies to public works projects erected, constructed, repaired, remodeled, or demolished by a private contractor for
 - a city or village with a population less than 2500 or
 - a town.

A local governmental unit or state agency that has a public works project that equals or exceeds the prevailing wage thresholds must do all of the following:

- Request a prevailing wage rate determination for the project from DWD at least 30 days before soliciting bids or negotiating contracts. An Application for Prevailing Wage Rate Determination is available on the DWD website: http://dwd.wisconsin.gov/er/prevailing_wage_rate/default.htm
 To avoid waiting for a project determination use the on-line application system that permits the user to generate a determination immediately and save all documents in PDF form to the user's computer. Use this project determination on line application at the following address:

http://dwd.wisconsin.gov/er/prevaling_wage_rate/pw_online_determinations.htm

- Tell potential contractors the project is subject to state prevailing wage law when soliciting bids.
- Include the prevailing wage rate determination in the construction contract, or if there is no written contract, provide a copy of the project determination to each prime contractor.
- Award contracts to contractors who do *not* appear on the “Consolidated List of Debarred Contractors.”
- Notify contractors that they are required to have a written substance abuse testing program in place that fulfills the requirements of §103.503, Wis. Stats., before commencing work on the prevailing wage project.
- Post the prevailing wage rate determination on the project site. (This document is often referred to as “the white sheet.”)
- Notify project contractors that if DWD finds that a contractor violated the prevailing wage law, DWD will assess liquidated damages of 100% of the wages owed to employees.
- Obtain an Affidavit of Compliance from each prime contractor before making final payment for the project.

If the total estimated cost of the project exceeds the prevailing wage thresholds, a local governmental unit or state agency also must obtain a prevailing wage rate determination under the following circumstances:

- when a completed facility is leased, purchased, lease-purchased or otherwise acquired by or dedicated to a public entity in lieu of the public entity contracting for the project,
- when one public entity does work for another public entity,
- when a *private* entity will construct a road, street, bridge, sanitary sewer or water main project and dedicate it to a local governmental unit or the state for its ownership or maintenance (except for some residential subdivisions).

For more information, visit the prevailing wage website: http://dwd.wisconsin.gov/er/prevaling_wage_rate/default.htm. For further assistance, call the Equal Rights Division at 608-266-6861 and ask for prevailing wage.

State of Wisconsin
Department of Workforce Development
Equal Rights Division
Labor Standards Bureau

POST THE WHITE SHEET

As the public entity receiving this prevailing wage rate determination, YOU ARE REQUIRED by law to post the prevailing wage rate determination (i.e., white sheet) in at least one conspicuous and easily accessible place on the project site that is available to all construction workers. The white sheet must remain posted from the onset of the project until all construction labor on the project has been completed.

[See, Wis. Admin. Code §DWD 290.12(1)]

Posting the white sheet inside the general contractor's trailer does not meet this requirement. That placement is not available/accessible to all workers and is not a location over which you have control.

If you have questions about posting, please call (608)266-6861 and ask for prevailing wage intake.

Consolidated List of Debarred Contractors
Prepared and Issued By

January 1, 2016

State of Wisconsin - Department of Workforce Development

This list has been prepared in accordance with the provisions of §§66.0903(12) and 103.49(7), Wis. Stats., and Chapter DWD 294 of the Wisconsin Administrative Code. All contractors on this list were found to have committed a "debarable offense" related to certain labor standard provisions determined or established for a state or local public works project. No state agency, local governmental unit or owner or developer may knowingly solicit bids from, negotiate with or award any contracts to or approve or allow any subcontracts with a debarred contractor, including all divisions, affiliates or other organizational elements of such contractor that are engaged in construction business activities, until the debarment is terminated. The name of each debarred contractor must remain on this list for a period of three (3) years from the termination date indicated below. The contractor is, however, only "debarred" from the "effective date" through the "termination date" indicated for that contractor. Questions regarding this list should be addressed to Jim Chiolino, Equal Rights Division, P. O. Box 8928, Madison, WI 53708 or call (608) 266-3345. Deaf, hearing or speech-impaired callers may contact the department by calling its TDD number (608) 264-8752.

<u>Name of Contractor</u>	<u>Address</u>	<u>Effective Date</u>	<u>Termination Date</u>	<u>Cause Code</u>	<u>Date of Violation(s)</u>	<u>Limitations/Deviations</u>
A-1 Duran Roofing & Insulation Services, Inc.	3700 N Fratney St Milwaukee, WI 53212	11/1/14	10/31/17	1, 2 and 4	2011- 2012	None
	or 8095 NW 64 th St Miami, FL 33166					
Abel, Mike	See, Abel Electric, Inc					
Abel Electric, Inc	3385 Belmar Rd Green Bay, WI 54313	9/1/12	8/31/15	1	2011	None
Alpha Electric, LLC	350 Business Park Dr Sun Prairie, WI 53590	8/1/15	7/31/18	4	2014	None
Arnie Christiansen Mason Contractors, LLC	2304 65 th Dr Franksville, WI 53126	9/1/14	8/31/16	1, 2 and 4	2011	None
Atkins, Scott	See, Freedom Insulation, Inc					
Boecker, Roger	See, R-Way Pumping, Inc					
Brechtl, Mark G	See, Ecodec, Inc					
Cargill Heating and Air Conditioning Company, Inc	3049 Edgewater La La Crosse, WI 54603	3/1/14	2/28/17	1 and 2	2011	None

Limitations/
Deviations

Date of
Violation(s)

Cause
Code

Termination
Date

Effective
Date

Address

Name of Contractor

<u>Name of Contractor</u>	<u>Address</u>	<u>Effective Date</u>	<u>Termination Date</u>	<u>Cause Code</u>	<u>Date of Violation(s)</u>	<u>Limitations/ Deviations</u>
Castlerock Commercial Construction, Inc	PO Box 11699 Milwaukee, WI 53211-0699	2/1/12	1/31/15	1, 2 and 4	2009 & 2010	None
Christiansen, Andy	See, Arnie Christiansen Mason Contractors, LLC					
Christiansen, Arnold	See, Arnie Christiansen Mason Contractors, LLC					
Darnick, Gregory L	See, Darnick Trucking, LLC					
Darnick Trucking, LLC	W914 County Rd V Berlin, WI 54923	11/1/14	10/31/15	1, 2 and 4	2012 & 2013	None
Dem/Ex Group, Inc	805 S Adams St Manito, IL 61546	12/1/11	11/30/14	1 and 2	2010	None
Duran, Bernardo	See, A-1 Duran Roofing & Insulation Services and RRS2 Inc					
Ecodec, Inc	5106 Wintergreen Dr Madison, WI 53704	10/1/14	9/30/17	1	2011 & 2012	None
Fisher, Ed &/or Fisher, Rhonda	See, Dem/Ex Group, Inc					
Freedom Insulation, Inc	117925 219th Ave Chippewa Falls, WI 54729	9/1/11	8/31/14	1	2008- 2010	None
Froode, Kathleen M	See, Masonry Specialists II, LLC					
Galstad, Michael E (aka Michael Earl Galstad)	See, Cargill Heating and Air Conditioning Company, Inc					
Gjolaj, Ded	See, Horizon Bros Painting Corp					

<u>Name of Contractor</u>	<u>Address</u>	<u>Effective Date</u>	<u>Termination Date</u>	<u>Cause Code</u>	<u>Date of Violation(s)</u>	<u>Limitations/Deviations</u>
Grade A Construction, Inc	157 Enterprise Rd Delafield, WI 53018	1/1/16	12/31/19	1, 2 and 4	2014	None
Horizon Bros Painting Corp	1053 Kendra La Howell, MI 48843	10/1/14	9/30/16	4	2012	None
JT Roofing, Inc	350 Tower Dr Saukville, WI 53080	6/1/12	5/31/15	1, 2 and 4	2007 & 2008	None
Jinkins, Richard	See, Castlerock Commercial Construction, Inc					
John's Concrete	See, Wagner Companies, Inc, dba John's Concrete					
Kott, Joseph J	See, Alpha Electric, LLC					
Masonry Specialists II, LLC	5109 Briarwood Ct Racine, WI 53402	8/1/15	7/31/18	4	2014	None
Mid-W Enterprises, Inc	1730 22 nd Avenue Kenosha, WI 53140	6/1/15	5/31/17	1, 2 and 4	2013	None
Midwest Construction Co, Inc	See, Mid-W Enterprises, Inc					
Oden, Cassie	See, A-1 Duran Roofing & Insulation Services and RRS2 Inc					
Ofstie, Darin	See, Precision Excavating and Grading, LLC					
Peret, Robert	See, A-1 Duran Roofing & Insulation Services and RRS2 Inc					

<u>Name of Contractor</u>	<u>Address</u>	<u>Effective Date</u>	<u>Termination Date</u>	<u>Cause Code</u>	<u>Date of Violation(s)</u>	<u>Limitations/Deviations</u>
Precision Excavating and Grading, LLC or Precision Excavating Enterprises, LLC	2104 Pierce Saint Croix Rd Baldwin, WI 54002	5/1/11	4/30/14	1, 2 and 4	2006- 2008	None
R-Way Pumping, Inc	3023 Lake Maria Rd Freeport, MN 56331	3/1/12	2/28/15	1, 2 and 4	2008	None
RRS2 Inc.	133 N Jackson St, #427 Milwaukee, WI 53202 or 1313 N Franklin Pl, #805 Milwaukee, WI 53202	11/1/14	10/31/17	1, 2 and 4	2011- 2012	None
Thull, Gerald T	See, JT Roofing, Inc					
Ventura, Robert	See, Mid-W Enterprises, Inc					
Wagner, Cory L	See, Wagner Companies, Inc					
Wagner Companies, Inc, dba John's Concrete	2063 Georgia Ave Racine, WI 53404	8/1/15	7/31/18	1	2013	None
Yaresh, Kathleen R	See, Grade A Construction, Inc					

Cause Code: 1 = Failure to Pay Straight Time 2 = Failure to Pay Overtime 3 = Kickback 4 = Payroll Records.

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Scott Walker, Governor
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PREVAILING WAGE – Contractors

Any public works project that has a total estimated project cost that equals or exceeds prevailing wage project thresholds requires a prevailing wage rate determination issued by the Department of Workforce Development (DWD). Public works include erecting, constructing, remodeling, repairing, demolishing, alterations, painting and decorating projects for a local governmental unit or state agency. State law excludes minor service or maintenance work, warranty work, or work under a supply-and-installation contract. There is a statutory definition for most of these exclusions. The prevailing wage laws that apply to local governmental units and their contractors are §§66.0903 and 103.503, Wis. Stats. The prevailing wage laws that apply to state agencies and their contractors are §§103.49 and 103.503, Wis. Stats. The applicable administrative rules for all prevailing wage projects are DWD 290 and DWD 294, Wis. Adm. Code. These laws include provisions that apply to all contractors and subcontractors working on prevailing wage projects.

Any contractor or subcontractor working on a local governmental unit or state agency's public works project that equals or exceeds current prevailing wage project thresholds must do all of the following:

- Receive and review the project's prevailing wage rate determination (i.e., white sheet).
- Tell subcontractors the project is subject to state prevailing wage law and include the prevailing wage rate determination in the construction contract, or if there is no written contract, provide a copy of the project determination to each subcontractor.
- Hire subcontractors who do *not* appear on the "Consolidated List of Debarred Contractors."
- Have a written substance abuse testing program in place that fulfills the requirements of §103.503, Wis. Stats., before commencing work on the project.

- Notify subcontractors that if DWD finds that a contractor or subcontractor violated the prevailing wage law, DWD will assess liquidated damages of 100% of the wages owed to employees.
- Apply to DWD for subjourney wage rates prior to employing these individuals on the project.
- Receive and retain a completed Affidavit of Compliance from each subcontractor brought on to the project before providing final payment to those subcontractors.
- Submit a completed Affidavit of Compliance to the contractor who brought the subcontractor on to the project before receiving final payment for the project.
- Maintain payroll records for 3 years that comply with §§66.0903(10)(a) or 103.49(5)(a), Stats. and DWD 274.06.
- Respond to requests from DWD or the project owner to provide payroll records and/or respond to prevailing wage complaints filed by employees or third parties.

For more information, visit the prevailing wage website: http://dwd.wisconsin.gov/er/prevailing_wage_rate/default.htm. For further assistance, call the Equal Rights Division at 608-266-6861 and ask for prevailing wage.

State of Wisconsin
 Department of Workforce Development
 Equal Rights Division

Disclosure of Ownership

The statutory authority for the use of this form is prescribed in Sections 66.0903(12)(d), 66.0904(10)(d) and 103.49(7)(d), Wisconsin Statutes.

The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes.

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1) (m), Wisconsin Statutes].

- (1) On the date a contractor submits a bid to or completes negotiations with a state agency, local governmental unit, or developer, investor or owner on a project subject to Section 66.0903, 66.0904 or 103.49, Wisconsin Statutes, the contractor shall disclose to such state agency, local governmental unit, or developer, investor or owner, the name of any "other construction business," which the contractor, or a shareholder, officer or partner of the contractor, owns or has owned within the preceding three (3) years.
- (2) The term "other construction business" means any business engaged in the erection, construction, remodeling, repairing, demolition, altering or painting and decorating of buildings, structures or facilities. It also means any business engaged in supplying mineral aggregate, or hauling excavated material or spoil as provided by Sections 66.0903(3), 66.0904(2), 103.49(2) and 103.50(2), Wisconsin Statutes.
- (3) This form must ONLY be filed, with the state agency project owner, local governmental unit project owner, or developer, investor or owner of a publicly funded private construction project that will be awarding the contract, if **both (A) and (B) are met.**
 - (A) The contractor, or a shareholder, officer or partner of the contractor:
 - (1) Owns at least a 25% interest in the "other construction business," indicated below, on the date the contractor submits a bid or completes negotiations; or
 - (2) Has owned at least a 25% interest in the "other construction business" at any time within the preceding three (3) years.
 - (B) The Wisconsin Department of Workforce Development (DWD) has determined that the "other construction business" has failed to pay the prevailing wage rate or time and one-half the required hourly basic rate of pay, for hours worked in excess of the prevailing hours of labor, to any employee at any time within the preceding three (3) years.

Other Construction Business

Business Name			
Street Address or P O Box	City	State	Zip Code
Business Name			
Street Address or P O Box	City	State	Zip Code
Business Name			
Street Address or P O Box	City	State	Zip Code
Business Name			
Street Address or P O Box	City	State	Zip Code

I hereby state under penalty of perjury that the information, contained in this document, is true and accurate according to my knowledge and belief.

Print the Name of Authorized Officer			
Authorized Officer Signature	Date Signed		
Corporation, Partnership or Sole Proprietorship Name			
Street Address or P O Box	City	State	Zip Code

If you have any questions call (608) 266-6861

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State of Wisconsin
 Department of Workforce Development
 Equal Rights Division

Prime Contractor Affidavit of Compliance With Prevailing Wage Rate Determination

Authorization for this form is provided under Sections 66.0903(9)(c), 66.0904(7)(c) and 103.49(4r)(c) Wisconsin Statutes.

The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes.

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m), Wisconsin Statutes].

This form must **ONLY** be filed with the **Awarding Agency** indicated below.

State Of _____))SS County Of _____)	Project Name	
	DWD Determination Number	Project Number (if applicable)
	Date Determination Issued	Date of Contract
	Awarding Agency	
	Date Work Completed	

After being duly sworn, the person whose name and signature appears below hereby states under penalty of perjury that

- **I am** the duly authorized officer of the corporation, partnership, sole proprietorship or business indicated below and have recently completed all of the work required under the terms and conditions of a contract with the above-named awarding agency and make this affidavit in accordance with the requirements set forth in Section 66.0903(9)(c), 66.0904(7)(c) or 103.49(4r)(c), Wisconsin Statutes and Chapter DWD 290 of the Wisconsin Administrative Code in order to obtain FINAL PAYMENT from such awarding agency.
- **I have** fully complied with all the wage and hour requirements applicable to this project, including all of the requirements set forth in the prevailing wage rate determination indicated above which was issued for such project by the Department of Workforce Development on the date indicated above.
- **I have** received the required affidavit of compliance from each of my agents and subcontractors that performed work on this project and have listed each of their names and addresses on page 2 of this affidavit.
- **I have** full and accurate records that clearly indicate the name and trade or occupation of every worker(s) that I employed on this project, including an accurate record of the hours worked and actual wages paid to such worker(s).
- **I will** retain the records and affidavit(s) described above and make them available for inspection for a period of at least three (3) years from the completion date indicated above at the address indicated below and shall not remove such records or affidavit(s) without prior notification to the awarding agency indicated above.

Name of Corporation, Partnership, Sole Proprietorship, Business, State Agency or Local Governmental Unit				
Street Address	City	State	Zip Code	Telephone Number
Print Name of Authorized Officer			Date Signed	
Signature of Authorized Officer				

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List of Agents and Subcontractors

Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number			Telephone Number		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number			Telephone Number		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number			Telephone Number		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number			Telephone Number		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number			Telephone Number		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number			Telephone Number		

If you have any questions call (608) 266-6861

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State of Wisconsin
 Department of Workforce Development
 Equal Rights Division

Agent or Subcontractor Affidavit of Compliance With Prevailing Wage Rate Determination

Authorization for this form is provided under Sections 66.0903(9)(b), 66.0904(7)(b) and 103.49(4r)(9b), Wisconsin Statutes. The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes.

Personal information you provide may be used for secondary purposes [Privacy Law, Section 15.04(1)(m), Wisconsin Statutes].

This form must **ONLY** be filed with the **Awarding Contractor** indicated below.

State Of _____))SS County Of _____)	Project Name	
	DWD Determination Number	Project Number (if applicable)
	Date Determination Issued	Date of Subcontract
	Awarding Contractor	
	Date Work Completed	

After being duly sworn, the person whose name and signature appears below hereby states under penalty of perjury that

- **I am** the duly authorized officer of the corporation, partnership, sole proprietorship or business indicated below. We have recently completed all of the work required under the terms and conditions of a subcontract with the above-named awarding contractor. We make this affidavit in accordance with the requirements set forth in Section 66.0903(9)(b), 66.0904(7)(b) or 103.49(4r)(b), Wisconsin Statutes and Chapter DWD 290 of the Wisconsin Administrative Code in order to obtain FINAL PAYMENT from such awarding contractor.
- **I have** fully complied with the entire wage and hour requirements applicable to this project, including all of the requirements set forth in the prevailing wage rate determination indicated above which was issued for such project by the Department of Workforce Development on the date indicated above.
- **I have** received the required affidavit of compliance from each of my agents and subcontractors that performed work on this project and have listed each of their names and addresses on page 2 of this affidavit.
- **I have** full and accurate records that clearly indicate the name and trade or occupation of every worker(s) that I employed on this project, including an accurate record of the hours worked and actual wages paid to such worker(s).
- **I will** retain the records and affidavit(s) described above and make them available for inspection for a period of at least three (3) years from the completion date indicated above at the address indicated below and shall not remove such records or affidavit(s) without prior notification to the awarding contractor.

Name of Corporation, Partnership, Sole Proprietorship, Business, State Agency or Local Governmental Unit				
Street Address or PO Box	City	State	Zip Code	Telephone Number ()
Print Name of Authorized Officer			Date Signed	
Authorized Officer Signature				

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List of Agents and Subcontractors

Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number ()			Telephone Number ()		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number ()			Telephone Number ()		
Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
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Name			Name		
Street Address			Street Address		
City	State	Zip Code	City	State	Zip Code
Telephone Number ()			Telephone Number ()		

If you have any questions call (608) 266-6861

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State of Wisconsin
 Department of Workforce Development
 Equal Rights Division
 Labor Standards Bureau

Request to Employ Subjourneyperson

The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes. Personal information you provide may be used for secondary purposes (Privacy Law, s. 15.04(1)(m), Wisconsin Statutes).

The employer indicated below requests that the Department of Workforce Development (DWD) determine the prevailing wage rate(s) and related qualifications to enable such employer to use a subjourneyperson(s) on the following prevailing wage project, in accordance with the provisions of Section DWD 290.025, Wisconsin Administrative Code.

1. Name of Project Appearing on the Project Determination			
County	City, Village or Town		
DWD Project Determination Number	Project Number (if applicable)		
2. Job Classification(s) for which you request a subjourney rate (i.e., carpenter, electrician, plumber, etc.)			
a.	b.		
c.	d.		
3. Employer Name (Print)			
Address	City	State	Zip Code
Telephone Number ()	Requester Title		
Email address (if you prefer to receive your response via email)	Fax Number (if you prefer to receive your response via fax) ()		

READ CAREFULLY: I understand that this request is ONLY applicable to the project and job classification(s) listed above and that subjourney employees primarily work under the direction of and assist a skilled trade employee by frequently using the tools of a skilled trade and will NOT regularly perform the duties of a general laborer, heavy equipment operator or truck driver. If the subjourney employee regularly performs the work of a different trade or occupation, he/she will be compensated for such work at the applicable journeyperson prevailing wage rate. I agree to compensate subjourney employees in strict accordance with the directions received from the DWD.

Requester Signature	Date Signed
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MAIL the completed request to:
 EQUAL RIGHTS DIVISION, LABOR STANDARDS BUREAU
 PO BOX 8928, MADISON WI 53708

OR

FAX the completed request to: (608) 267-4592 / DO NOT e-mail your request.
 Call (608) 266-6861 for assistance in completing this form.

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ADDITIONAL GENERAL PREVAILING WAGE LAW INFORMATION

(This document updated July 2015)

NOTE: Recent prevailing wage law changes enacted by the 2015-17 Budget Bill (2015 Wisconsin Act 55) do not go into effect until calendar year 2017.

For prevailing wage laws and frequently asked questions, refer to the prevailing wage website at: http://dwd.wisconsin.gov/er/prevailing_wage_rate/default.htm

Topic	Who's affected?	Brief description of requirement under §66.0903 or §103.49
Non-applicability	All public entities	Prevailing wage rates do not apply to minor service or maintenance work, warranty work, or work under a supply and installation contract.
Non-applicability: Minor service or maintenance work	Local governmental units & Contractors	<p>Minor service or maintenance work means a project of public works that is limited to</p> <ul style="list-style-type: none"> • minor crack filling, chip or slurry sealing, or other minor pavement patching, not including overlays, that has a projected life span of no longer than 5 years or that is performed for a TOWN and is not funded under §86.31, regardless of projected life span; • the depositing of gravel on an existing gravel road applied solely to maintain the road; • road shoulder maintenance; • cleaning of drainage or sewer ditches or structures; or • any other limited, minor work on public facilities or equipment that is routinely performed to prevent breakdown or deterioration.
Non-applicability: Minor service or maintenance work	State agencies	<p>Minor service or maintenance work means a project of public works that is limited to</p> <ul style="list-style-type: none"> • minor crack filling, chip or slurry sealing, or other minor pavement patching, not including overlays, that has a projected life span of no longer than 5 years; • cleaning of drainage or sewer ditches or structures; or • any other limited, minor work on public facilities or equipment that is routinely performed to prevent breakdown or deterioration.
Non-applicability: Supply & installation contract	All public entities	Supply and installation contract means a contract under which the material is installed by means of simple fasteners or connectors such as screws or nuts and bolts and no other work is performed on the site of the project of public works, and the total labor cost to install the material does not exceed 20 percent of the total cost of the contract.
Non-applicability: Work which a contractor or individual donates to a public entity	All public entities	Prevailing wage laws §§66.0903 & 103.49, Stats., do not apply to work performed on a project of public works for which the local governmental unit or the state or the state agency contracting for the project is not required to compensate any contractor, subcontractor, contractor's or subcontractor's agent, or individual for performing the work.

Topic	Who's affected?	Brief description of requirement under §66.0903 or §103.49
Non-applicability: Residential	All public entities	A prevailing wage rate determination is not required for the erection, construction, repair, remodeling, or demolition of a residential property containing 2 dwelling units or less.
Non-applicability: Residential subdivision infrastructure	All public entities	A prevailing wage rate determination is not required for a road, street, bridge, sanitary sewer, or water main project that is a part of a development in which at least 90 percent of the lots contain or will contain 2 dwelling units or less, as determined by the local governmental unit at the time of approval of the development, and that, on completion, is acquired by, or dedicated to, a local governmental unit (including under §236.13(2), Stats.), or the state, for ownership or maintenance by the local governmental unit or the state.
Electronic certified payroll record	Contractors	The requirement that every contractor on a prevailing wage project submit to DWD monthly a certified record of employees who worked on the project and that DWD post these certified records on its Internet website was discontinued effective July 1, 2011. Contractors are still required to maintain payroll records and provide them upon request from DWD &/or the project owner.
Payroll record inspection request by any person	Contractors & Complainants	Any person may request DWD to inspect the payroll records of any contractor working on a prevailing wage project. On receipt of such a request, the contractor must submit to DWD a certified record of its payroll records, other than personally identifiable information relating to an employee of the contractor, for no longer than a 4-week period. DWD may request records from a contractor under this provision no more than once per calendar quarter for each project of public works on which the contractor is performing work. The department may not charge a requester a fee for obtaining that information. DWD must make these certified records available for public inspection.
Statewide uniformity	Local governmental units	A local governmental unit may not enact & administer a prevailing wage ordinance/provision for public works or publicly funded private construction projects. Any extant laws to that effect are void.
Substance Abuse Testing	Contractors & Workers	Before commencing work on a prevailing wage project, a contractor must have a written substance abuse testing program in place that complies with §103.503, Wis. Stats. No employee may use, possess, attempt to possess, distribute, deliver, or be under the influence of a drug or under the influence of alcohol while performing work on a prevailing wage project.

Topic	Who's affected	Brief description of requirement under §66.0903 or §103.49
Covered employees	Truck drivers & Other workers & Contractors	<p>A laborer, worker, mechanic, or truck driver who is employed to process, manufacture, pick up, or deliver materials or products from a commercial establishment that has a fixed place of business from which the establishment supplies processed or manufactured materials or products or from a facility that is not dedicated exclusively, or nearly so, to a project of public works is NOT entitled to receive the prevailing wage rate UNLESS any of the following applies:</p> <ul style="list-style-type: none">1) the laborer, worker, mechanic, or truck driver is employed to go to the source of mineral aggregate such as sand, gravel, or stone and deliver that mineral aggregate to the site of a project of public works by depositing the material directly in final place, from the transporting vehicle or through spreaders from the transporting vehicle.2) the laborer, worker, mechanic, or truck driver is employed to go to the site of a project of public works, pick up excavated material or spoil from the site of the project, and transport that excavated material or spoil away from the site of the project.

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INFORMATION FOR BIDDING AND EXECUTION OF CONTRACT

1. INFORMATION AVAILABLE VIA 'QUESTCDN'

Complete digital project bidding documents are available at www.questcdn.com. You may download the digital plan documents for \$ 50.00 by inputting Quest project # **4288001** on the website's Project Search page. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. Bidding documents may be examined at the offices of City of Marshfield, Engineering Division, 630 S Central Avenue, Marshfield, WI 54449. A current plan holder's list and bid tabulation will be available on the QuestCDN.com website after bids are opened.

2. WAGE SCALE

The Contractor shall be bound by the Prevailing Wage Rate Determination attached to the Special Provisions and a part of this Contract. The Contractor shall furnish certified copies of his payroll for any period when requested by the Owner.

3. PREPARATION OF PROPOSAL

The Bidder shall submit his Proposal on the form furnished by the Owner. The Proposal shall be executed properly and unit prices shall be offered for all items indicated on the Proposal Form.

In case of conflict between the Unit Price and the corresponding extended amount, the Unit Price shall govern.

All writing shall be with ink or typewriter except the signature, which shall be written with ink.

A Proposal submitted by an individual shall be signed by the Bidder or by a duly authorized agent. A Proposal submitted by a partnership shall be signed by a member or by a duly authorized agent thereof. A Proposal submitted by a corporation shall be signed by an authorized officer or duly authorized agent of such corporation, and the Proposal shall show the name of the state under the laws of which said corporation was chartered. The required signature shall, in all cases, appear in the space provided therefore on the Proposal.

4. SUBCONTRACTING

The Contractor will be permitted to sublet a portion of the Contract, but shall perform with his own organization, work amounting to at least 30 percent of the original Contract amount.

If the Contractor shall sublet any part of this Contract, the Contractor shall be as fully responsible to the Owner for the acts and omissions of his Subcontractor and of the persons either directly or indirectly employed by his Subcontractor as he is by acts or omissions of persons directly employed by himself. All Subcontractors, if any, shall be listed in the spaces provided on the Proposal Form and said list shall not be added to or altered without the written consent of the Owner.

5. FORMS TO BE INCLUDED AS THE 'BID'

Forms to be included by the Bidder and submitted to the Owner as the 'Bid' include the following:

- **Proposal**
- **Proposal Guarantee**
- **Full and Complete List of Subcontractors and Suppliers**

These forms/sections can be identified by the title on the first page of said section and the footer on the bottom of each page. Prospective Bidders shall go through these sections and fill them out completely. Failure to do so may result in having your bid be considered non-responsive.

Note: Form/sections to be executed by the successful low bidder as the 'Contract' includes the Certificate of Insurance, Performance and Payment Bond, and Contract.

6. PROPOSAL GUARANTEE

No Proposal will be considered unless accompanied by a certified check or bid bond in the amount, and payable to, the party as designated in the advertisement.

If alternate bids are invited and submitted, the Proposal Guarantee shall cover the amount of the highest alternate.

7. QUANTITIES

The estimated quantities of work as shown on the plans or in the contract documents have been compiled for the purpose of comparing proposals and are believed to be reasonably accurate. The Owner reserves the right to increase quantities, decrease quantities, delete items of work or order extra work as discussed in the Standard Specifications (Section 1.2).

8. INTENT OF PLANS AND SPECIFICATIONS

The direct intent of the Plans and Specifications is to provide for the construction, execution, and completion of every detail of a complete work or improvement which the Contractor undertakes to do in full compliance with the Plans, Specifications, Special Provisions, and all other Contract requirements. The Contractor shall perform all items of work covered and stipulated in the Proposal, including altered and/or extra work, all in accordance with the lines, grades, sections, and dimensions given, and shall furnish, unless otherwise provided in the Contract, all materials, implements, machinery, equipment, tools, supplies, and transportation and labor necessary for the prosecution and completion of the work.

9. DELIVERY OF PROPOSALS

Each Proposal shall be placed, together with the Proposal Guarantee, in a sealed envelope so marked as to indicate the project number and location and shall also show the name and address of the Contractor. Proposals will be received at the place designated in the advertisement until the hour on the date set for the receiving thereof and must be in the hands of the City Engineer by that time. When sent by mail, the sealed Proposal marked as indicated above shall be enclosed in an additional envelope. Proposals sent by mail must be in the hands of the City Engineer by the hour on the date set for receiving bids.

10. WITHDRAWAL OF PROPOSALS

A Bidder may withdraw his Proposal, provided the request in writing is in the hands of the officer conducting the letting, by the time set for opening Proposals and that such request for withdrawal is not contingent on the result of bids read on other projects. Such Proposal will be returned to the Bidder unopened.

11. OPENING OF PROPOSALS

Proposals will be opened and read publicly at the time and place indicated in the advertisement. Bidders or their authorized agents are invited to be present.

12. REJECTION OF PROPOSALS

Proposals may be rejected if they show any alterations of form, additions, or amendments not called for, conditional or alternate bid unless called for, incomplete bids, erasures, or irregularities of any kind.

Proposals in which unit prices are not submitted for each item or work listed may be rejected.

13. DISQUALIFICATION OF BIDDERS

Any one or more of the following causes may be considered as sufficient for rejection of the bid or bids and disqualification of the Bidder from further bidding for such period of time as determined by the Owner:

More than one Proposal for the same work from an individual, partnership, or corporation under the same or different names.

Evidence of collusion among the Bidders.

Lack of responsibility as shown by past work for the Owner, judged from the standpoint of workmanship and progress.

Noncompliance with terms of previous Contracts.

Uncompleted work which, in the judgment of the Owner, might hinder or prevent prompt completion of additional work if awarded.

14. CONSIDERATION OF PROPOSALS

The Proposals received will be compared on the basis of summation of products of the items or work listed and the Contract unit prices offered. In case of discrepancy between the gross sum shown in the Proposal and that obtained by adding the products of the quantities of work for unit prices, the unit prices shall govern and any errors found in said projects shall be corrected. In awarding the Contract, the Owner may, in addition to considering the amount stated in the Proposal, take into consideration the responsibility of the various Bidders as determined from any investigation which it may elect to make.

The right is reserved to reject any or all Proposals, to waive technicalities, to re-advertise for Proposals, or to proceed to do the work otherwise, if, in the judgment of the Owner, the best interest of the City will be promoted thereby.

15. AWARDING OF THE CONTRACT

The Contract shall be deemed to have been awarded when notice in writing is forwarded by the City Engineer pursuant to actions of the Board of Public Works and/or Common Council.

16. RETURN OF PROPOSAL GUARANTEE

The Proposal guarantees of all except the two (2) lowest responsible Bidders will be returned within a reasonable time after the Proposals have been checked and tabulated. Proposal Guarantees of the two (2) lowest Bidders will be returned as soon as the Contract and Contractor's 100% Performance Bond and other documents required to be signed by the successful Bidder have been properly executed by the Bidder and submitted in proper form to the Owner.

17. EXECUTION OF CONTRACT

Executed and complete Contracts shall be presented to the Owner within ten (10) calendar days after the date of the Notice of Award of the Contract. The Contract shall be executed by the Bidder/Contractor and the Contractor's bond(s) shall be executed by the Principal and Surety.

The Contractor shall submit insurance documents along with the executed Contract. Insurance documents shall include a Certificate of Insurance which clearly indicates compliance with the Contractor Liability Insurance Requirements as specified in the City's Standard Specifications (Section 1.1.9). In addition to the Certificate of Insurance, the Contractor shall submit a complete copy of the appropriate endorsements(s), such as but not limited to the endorsement which names the city of Marshfield as an additional insured.

Submission of improperly executed documents, or incomplete documents (such as failing to submit the Certificate of Insurance and /or endorsements) will delay final execution of the Contract by the Owner, and possibly the start of construction, however the schedule for completion of the project(s) will not be adjusted.

Final execution of the Contract by the Owner will occur after the Owner's attorney has reviewed the documents. The Owner and attorney shall be allowed a reasonable amount of time to complete their review/execution of the Contract (three working days minimum).

No Contract shall be considered binding upon the Owner until final execution of the Contract by the Owner.

18. FAILURE TO EXECUTE CONTRACT

Failure on the part of the successful Bidder to execute a Contract and an acceptable Contractor's bond within ten (10) days after the date of notice of the awarding of the Contract will be considered as just cause for the annulment of the awarding and the forfeiture of the Proposal Guarantee to the Owner as payment of liquidated damages sustained as a result of such failure.

**CONTRACT 2016-01
SPECIAL CONDITIONS
INDEX**

Article No.	Standard Specification Chapter	Item/Article Name
1.	1	Project Scope
2.	1	Prosecution and Progress
3.	1	Staging of Construction
4.	1	Construction Vehicle Access
5.	1	Notification by Contractor
6.	1	Storage of Materials or Equipment
7.	1	Utilities
8.	1	Obstacles
9.	1	Construction Staking
10.	1	Public Information Meetings
11.	1	Project Sign(s) Required
12.	1	Sales and Use Tax Exemption
13.	2	Terrace and Private Trees
14.	3	Removal and Disposition of Existing Materials
15.	3	Caution – Do Not Damage Existing Utilities to Remain
16.	3	Removal of Existing (Street) Pavement and Curb {East 2 nd Street Reconstruction Project}
17.	4	Management of Contaminated Soil {East 2 nd Street Reconstruction Project}
18.	4	Monitoring Wells {East 2 nd Street Reconstruction Project}
19.	4	Excavation Behind Curb {East 2 nd Street Reconstruction Project}
20.	4	Compaction
21.	5	Salvage and Re-Spread Existing Gravel {1 st & Cedar intersection Reconstruction Project}
22.	6	Maintain Existing Storm Sewer and Drainage
23.	6/19/20	Trench Plugs/Clay Dams
24.	6/20	Sewer Lateral Televising
25.	6/20	Sewer Laterals and Buildings With 5-Feet of Right-of-Way
26.	6/20	Private Sanitary and/or Storm Lateral Replacements
27.	10	Remove Foundation Wall
28.	10	Abandon Vault
29.	10	Abandon Pull Box {West 2 nd Street Reconstruction Project}
30.	10	Water Main Removal {East 2 nd Street Reconstruction Project}
31.	10	Removed Fittings {East 2 nd Street Reconstruction Project}
32.	10	Remove Signal/Pole Bases {2 nd Street Reconstruction Projects}
33.	10	Removal of Existing Sanitary and/or Storm Sewer Lateral
34.	11	Concrete and Concrete Pavement
35.	11	Colored Concrete
36.	11	Treat and Seal New Concrete Pavement Joints
37.	12	Asphalt Pavement By Others
38.	15	Install Detectable Warning Field
39.	15	Special Grades/Finishing Required Where Sidewalks Abut Curb (and/or Buildings)
40.	15	Curb Ramp and Landing Slopes – Layout and Confirmation
41.	15	Seal Expansion Joint
42.	16	Restoration of Turf Surfaces (Finished Terraces)

43.	16	Finished Planting Areas {Excluding 2 nd Street Reconstruction Projects}
44.	16	Planting Soil {2 nd Street Reconstruction Projects}
45.	16	Planting Soil/Root Cell Support Matrix {West 2 nd Street Reconstruction Project}
46.	16	Tree Grates (with Tree Guards) {West 2 nd Street Reconstruction Project}
47.	16	Permeable Pavers Over Concrete {2 nd Street Reconstruction Projects}
48.	16	Furnishing and Planting Plant Materials {2 nd Street Reconstruction Projects}
49.	16	Hardwood Mulch {2 nd Street Reconstruction Projects}
50.	16	Stone Mulch {East 2 nd Street Reconstruction Project}
51.	16	Corner Emblem {2 nd Street Reconstruction Projects}
52.	17	Re-Seal Existing Colored Concrete Surface {Colored Concrete Maintenance and Repairs Projects}
53.	17	Clean, Treat and Re-Seal Existing Concrete Pavement Joints
54.	17	Existing Colored Concrete Partial Depth Repair {Colored Concrete Maintenance and Repairs Projects}
55.	17	Remove and Replace Existing Colored Concrete Crosswalk {Colored Concrete Maintenance and Repairs Projects}
56.	18	Erosion Controls
57.	19	Temporary Water {East 2 nd Street Reconstruction Project}
58.	19	Vertical Offsets of Water Main {East 2 nd Street Reconstruction Project}
59.	19	Contaminated Soil Water Main Gaskets {East 2 nd Street Reconstruction Project}
60.	20	Existing PVC Sanitary Sewers and Groundwater
61.	20	Connect to Existing Sanitary Sewer Mains {East 2 nd Street Reconstruction Project}
62.	22	Light Pole/Bollard Bases, Electrical Conduit, Pull Boxes and Wiring {2 nd Street Reconstruction Projects}
63.	22	Install Street Light/Poles {East 2 nd Street Reconstruction Project}
64.	22	Install Lighted Bollard {2 nd Street Reconstruction Projects}
65.	22	Power Pedestals {2 nd Street Reconstruction Projects}
66.	24	Traffic Control
67.	25	Pavement Marking Curb Head, Yellow, Epoxy {Special Location}
68.	25	Remove and Salvage Existing Signs {2 nd Street Reconstruction Projects}
69.	25	Permanent Signs and Posts {2 nd Street Reconstruction Projects}
70.	25	Block Retaining Wall {1 st & Cedar Intersection Reconstruction Project}
71.	25	Tree Pit Planter Curb {2 nd Street Reconstruction Projects}
72.	25	Public Art Base {2 nd Street Reconstruction Projects}

SPECIAL CONDITIONS

1. PROJECT SCOPE

City of Marshfield Contract 2016-01 includes the following projects:

- A. Oak Avenue Sidewalk Reconstruction (Depot Street to Cleveland Street)
- B. Alley Reconstruction (Chestnut/Central/6th/5th)
- C. 1st Street & Cedar Avenue Intersection Reconstruction
- D. West 2nd Street Reconstruction (Chestnut Avenue to Central Avenue)
- E. East 2nd Street Reconstruction (Central Avenue to Maple Avenue)
- F. Colored Concrete Maintenance and Repairs, Central Avenue (17th Street to 2nd Street) and Chestnut Avenue (7th Street to 1st Street)

The scope of each project is briefly described as follows:

- A. Oak Avenue Sidewalk Reconstruction (Depot Street to Cleveland Street)

Work on this project will include removal and replacement of sidewalks on Oak Avenue (both sides) as shown on the plans, including driveway approaches, curb ramps, curb and gutter (at intersections), and sawing existing curb head, along with excavation, gravel base, asphalt pavement repair and turf restoration.

Oak Avenue shall remain open throughout construction, for local traffic only. All side streets shall remain open (for all traffic).

- B. Alley Reconstruction (Chestnut/Central/6th/5th)

Reconstruction of this existing alley will include removal of existing concrete pavement, replacement of existing storm sewer laterals (existing concrete trunkline pipe to remain), and street/alley improvements including a drained subbase and concrete pavement.

This alley will be closed to all traffic for this reconstruction.

- C. 1st Street & Cedar Avenue Intersection Reconstruction

Reconstruction of this existing intersection will improve access to existing 1st Street along with upgrading the access/driveway for the City's new Municipal Library and parking lots (expected to be completed by the end of August, 2016). Work on this project includes removal of existing concrete pavement and sidewalk; new concrete pavement, curb and gutter and sidewalk; and a new block retaining wall; along with excavation, gravel base, asphalt pavement approach and restoration.

Both 1st Street and Cedar Avenue will be closed for this reconstruction.

- D. West 2nd Street Reconstruction (Chestnut Avenue to Central Avenue)

Although recently reconstructed, this block of West 2nd Street will be modified to provide enhanced streetscape and landscaping features. Work on this project will include carefully sawing and removing existing concrete pavement, curb and gutter, sidewalk, curb ramps and driveways; modifying existing storm sewer, expanding the existing underground electrical/lighting (and festoon receptacle) system with the addition of lighted bollards and power pedestals; new concrete pavement, curb and gutter, sidewalk, curb ramps and driveways, including colored concrete elements; and new streetscape/landscape features including curbed and grated planting areas, permeable pavers, public art display pad, and plantings (trees, shrubs, hedges, etc.);

along with all excavation, aggregate base, epoxy pavement marking and signing.

West 2nd Street shall be closed to vehicular traffic but shall remain open and accessible for pedestrian traffic.

E. East 2nd Street Reconstruction (Central Avenue to Maple Avenue)

This block of East 2nd Street will be completely reconstructed. The work shall include removal of existing concrete and asphalt surfaces; replacement of existing sanitary sewer, storm sewer and water main; new street improvements including drained subbase, concrete pavement, curb and gutter and sidewalks, including colored concrete elements; decorative street lighting and festoon receptacles, including lighted bollards and power pedestals; streetscape/landscape features including curbed planting areas, permeable pavers, public art display pad, and plantings (trees, shrubs, hedges, etc.); along with all excavation (including contaminated soil management), aggregate base, asphalt pavement, epoxy pavement marking and signing.

East 2nd Street shall be closed for this reconstruction.

F. Colored Concrete Maintenance and Repairs, Central Avenue (17th Street to 2nd Street) and Chestnut Avenue (7th Street to 1st Street)

Existing colored concrete surfaces shall be maintained, repaired and/or replaced as indicated in the plans (spreadsheets) and per the discretion of the City Engineer. The assumed scope of this project includes:

- (1) Central Avenue – Crosswalks: All existing colored concrete pavement crosswalk surfaces shall be cleaned/prepared, dried, masked and the surface resealed unless said crosswalk is designated to be replaced. All transverse, longitudinal and peripheral joints shall be cleaned and resealed.

Central Avenue shall remain open however lane closures will be required (per plan details).

- (2) Central Avenue – Medians and Islands: All existing colored concrete pavement medians and colored concrete island sidewalks shall be resealed, including cleaning/preparation, drying, masking and surface resealing. Concrete pavement repair or replacement, and joint resealing are not anticipated for these areas.

Central Avenue shall remain open however lane closures will be required (per plan details). This work shall be done concurrent with resealing inside lane crosswalks.

- (3) Chestnut Avenue – Crosswalks: All existing colored concrete pavement crosswalk surfaces shall be resealed including cleaning/preparation, drying, masking and surface resealing. Concrete pavement repair or replacement, and joint resealing are not anticipated for these crosswalks.

Chestnut Avenue shall remain open however lane closures will be required (per plan details).

2. PROSECUTION AND PROGRESS

Perform the work under this construction contract as indicated on the plans and details, and execute the work as specified in these Special Provisions, the City of Marshfield 2016 Standard Specifications for Public Works Construction; and if so referenced the State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, Current Edition, and/or the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition with Addendum Nos. One and Two.

The Contractor shall provide a detailed schedule of construction operations (7 days prior to the preconstruction conference). All completion dates and/or completion periods shall include all work, by Contractor and others. The Contractor's schedule will comply with the following:

- A. Oak Avenue Sidewalk Reconstruction (Depot Street to Cleveland Street)
Anticipated Start of Construction: On or after June 6, 2016.
Final Completion: Within 26 calendar days but before August 27, 2016.
Penalty: \$250 per calendar day.
- B. Alley Reconstruction (Chestnut/Central/6th/5th)
Anticipated Start of Construction: On or after June 6, 2016.
Final Completion: Within 40 calendar days but before July 28, 2016. Final completion for this project does not include concrete pavement joint sealing, which shall be done concurrently with the joint sealing for the 2nd Street projects.
Penalty: \$450 per calendar day.
- C. 1st Street & Cedar Avenue Intersection Reconstruction
Anticipated Start of Construction: On June 13, 2016.
Final Completion: On or before July 9, 2016. Final completion for this project does not include concrete pavement joint sealing, which shall be done concurrently with the joint sealing for the 2nd Street projects.
Penalty: \$250 per calendar day.
- D. West 2nd Street Reconstruction (Chestnut avenue to Central Avenue)
Anticipated Start of Construction: On or after August 1, 2016.
Final Completion: Before September 2, 2016 and concurrent with (within 5 days) the East 2nd Street Project.
Penalty: \$450 per calendar day.
- E. East 2nd Street Reconstruction (Central Avenue to Maple Avenue)
Anticipated Start of Construction: On or after June 13, 2016.
Final Completion: Within 61 calendar days but before September 2, 2016.
Penalty: \$650 per calendar day.
- F. Colored Concrete Maintenance and Repairs, Central Avenue (17th Street to 2nd Street) and Chestnut Avenue (7th Street to 1st Street)
 - (1) Chestnut Avenue (7th Street to 1st Street); Crosswalks
Anticipated Start of Construction: On or after June 13, 2016.
Final Completion: Within 26 calendar days but before September 2, 2016. No work or traffic impacts allowed July 29, 2016 through July 31, 2016 (Marshfield's Hub City Days).
Penalty: \$250 per calendar day.
 - (2) Central Avenue (17th Street to 2nd Street); Crosswalks, Medians and Islands
Anticipated Start of Construction: On or after June 13, 2016.
Final Completion: Within 33 calendar days but before September 2, 2016. No work or traffic impacts (including parking) are allowed July 1, 2016 through July 4, 2016 and July 29, 2016 through July 31, 2016.
Penalty: \$450 per calendar day.

3. STAGING OF CONSTRUCTION

Pedestrian Accommodations: Accommodate pedestrian traffic as much as possible throughout the duration of the construction project. Pedestrian access can be maintained by utilizing existing sidewalks, proposed gravel (sidewalk base), or temporary surfaces such as boardwalks, planking,

tread plates or gravel (graded, compacted and maintained) to provide a smooth, free draining and walkable surface. Volumes/quantities of temporary gravel will not be measured for payment. Traffic control devices shall be used to mark inaccessible sidewalk locations as specified elsewhere. Use/install safety fence to delineate walkways and protect pedestrians.

As noted/shown on the staging plans, commercial/public buildings must have access to their entrances/doors (also noted/shown on said plans) at all times. These buildings typically include businesses or apartments that do not have satisfactory access via alternate entrances/doors. Continuous ingress/ egress to said entrances/doors can be provided by phasing sidewalk construction, alternating routes (i.e. to side street vs. alley, etc.) or other measures if approved by the Engineer. Provide notice to building owners/tenants at least 24 hours prior to changing an access route.

Accelerated Construction Schedule: The contract staging and interim completion deadlines may require higher than normal production of materials, installation and work efforts, possibly requiring multiple or concurrent controlling operations.

Confined Work Zone(s): Special staging/operations may be necessary to confine construction operations (such as but not limited to excavation, trenching, backfilling, spoil storage, etc.) within the existing right-of-ways. Private properties may be available for use; however it is the Contractor's responsibility to make said arrangements/agreements. Contractor shall inform the City of properties whose owner(s) have agreed with Contractor for said use, however, the City Engineer hereby assumes no responsibility/liability regarding said arrangements/agreements.

Sewer and Lateral Reconstruction: Coordinate with City of Marshfield staff/officials such that the existing sewer (sanitary and storm) laterals are confirmed to be live or abandoned, in accordance with the Standard Specifications. Note: The status of many laterals can only be determined upon excavation of the existing and/or proposed sewer facilities. Coordinate with property owners (and their plumbers/contractors) regarding replacement of said laterals.

Utility Facility Reconstruction: We Energies, Frontier Communications, Marshfield Utilities and Charter Communications, and/or their designated subcontractors will be reconstructing gas, telephone, electric and/or cable facilities, mains and/or services as described in these Special Conditions - #7 Utilities prior to or concurrent with construction. The Contractor shall coordinate with each utility as necessary to accomplish timely reconstruction of their facilities.

Staging/Coordination/Access Requirements:

A. Oak Avenue Sidewalk Reconstruction (Depot Street to Cleveland Street)

Stage sidewalk reconstruction such that driveways are accessible for residential use as much as possible. The commercial driveway at 600 West Blodgett Street (Neighborhood Bar) shall be accessible at all times (via placement of temporary gravel surface and/or pouring sidewalk/driveway one half at a time).

Coordinate with the City's asphalt paving contractor regarding asphalt pavement replacement.

B. Alley Reconstruction (Chestnut/Central/6th/5th)

Coordinate with:

- Waste collection services for placement and collection of refuse and recycling containers and materials.
- We Energies regarding gas mains and service line replacement
- Frontier Communications regarding removal of a wood pole.
- City (Wastewater) staff regarding storm lateral replacement/televising.
- City's asphalt paving contractor regarding asphalt pavement replacement.

C. 1st Street & Cedar Avenue Intersection Reconstruction

Coordinate with:

- Boson Company regarding access to the City's new Municipal Library (under construction).
- City's asphalt paving contractor regarding asphalt pavement replacement.

D. West 2nd Street Reconstruction (Chestnut Avenue to Central Avenue)

Stage all work for this project to minimize pedestrian access disruption. Final completion is to coincide with completion of East 2nd Street reconstruction to minimize inconvenience to the public and reduce Contractor's mobilizations for work such as but not limited to concrete, landscaping, pavement marking and joint sealing.

Coordinate with:

- Business owners and tenants regarding access.
- US Postal Service regarding closure of the mail box drop off driveway and relocation of the mailboxes.
- City's electrician regarding removal of traffic signals for 2nd Street.
- City's asphalt paving contractor regarding asphalt pavement replacement.

E. East 2nd Street Reconstruction (Central Avenue to Maple Avenue)

Stage all work such that this street will be completed (including street lighting, landscaping, pavement marking, signing and joint sealing) promptly, with few mobilizations and minimal periods of inactivity.

Coordinate with:

- Business owners and tenants regarding access.
- City's electrician regarding removal of traffic signals for 2nd Street.
- Marshfield Utilities regarding removal of existing street lighting.
- Frontier Communications regarding utility conflicts and/or replacement.
- We Energies regarding utility conflicts and/or replacement.
- City (Wastewater) staff regarding sewer lateral replacement/televising.
- City's Street Department regarding their re-marking of the parking lot.
- City's asphalt paving contractor regarding asphalt pavement replacement.

F. Colored Concrete Maintenance and Repairs, Central Avenue (17th Street to 2nd Street and Chestnut Avenue (7th Street to 1st Street)

Stage all work and traffic controls to allow safe and efficient work areas while minimizing impacts to vehicular traffic, pedestrians, business access and parking.

Complete work at each individual work site promptly, with minimal periods of inactivity, thus requiring the Contractor to coordinate closely with Subcontractors.

4. CONSTRUCTION VEHICLE ACCESS

Trucks hauling materials to or from each project site shall utilize only truck route streets that are indicated on the City of Marshfield Truck Route Map (included with these Special Provisions), unless other routes are approved by the City Engineer via the City's Overweight Permit process.

Construction vehicles (such as tractors, loaders, etc.) shall also comply with these requirements. Construction vehicles traveling from one portion of the project to another are not allowed to travel on non-truck route streets, unpermitted (overweight) streets nor any other public or private driveways/entrances/parking lots/etc.; and if construction vehicles utilize these roadways, the

Contractor may be subjected to fines, in addition to costs for repairs to said damaged surfaces (per judgment of the City Engineer).

5. NOTIFICATION BY CONTRACTOR

The Contractor shall notify the agencies listed below if road closures or changes in access can be expected to occur. The notice shall be distributed via fax at least 48-hours prior to closing a roadway or changing access. All notices shall briefly summarize the current status or work and access, and discuss progress or changes which are expected to occur within the next two weeks. The notice shall be signed by the Contractor’s agent who prepared it and include contact information (with phone numbers) where notified agencies can call to ask questions.

The City Engineer will provide email addresses/contacts to the Contractor for distribution of said Notice. Fax numbers can be used if emails are undeliverable/returned.

Agencies to be notified include:

AGENCY	FAX NUMBER
City of Marshfield – Public Works, Engineering Division	715.384.7631
City of Marshfield – Public Works, Street Division	715.486.2081
City of Marshfield – Police Department	715.384.0823
City of Marshfield – Fire Department	715.384.8868
St. Joseph’s Hospital EMS	715.389.4040
US Post Office, Marshfield	715.387.1649
Wood County – Sheriff’s Department	715.421.8775
Wood County – Sheriff’s Department – Marshfield Annex	715.384.4602
Wood County Highway Department	715.421.8808
Wood County Dispatch	715.421.8504
Marshfield Bus Service	715.387.0766
Main Street Marshfield	715.387.2286
Advanced Disposal Services (formerly Veolia ES)	715.384.3445
Waste Management	866.877.3790

The Contractor shall notify all occupied properties (commercial and residential, including renters) of the start of construction at least three calendar days prior to the beginning of said work. The City Engineer can supply a list of mailing addresses, upon request.

6. STORAGE OF MATERIALS OR EQUIPMENT

The Contractor may be allowed to utilize existing roadways and/or right of ways within the construction limits of each project, to temporarily store materials and equipment if approved in writing by the City Engineer. Each material pile, stack, etc. or piece of equipment shall be located alongside of the traveled way and protected through the use of reflectorized drums with Type A flashers visible from all directions of travel.

The Contractor shall not utilize property beyond the right of way (private lands), parcels upon which the City of Marshfield has acquired easement rights, or any City-owned parks/parking lots/etc. except as discussed below, unless the Contractor obtains written permission for use from the property owner(s). Contractor shall inform the City Engineer of said permission/agreements; however, the City Engineer hereby assumes no responsibility/liability regarding said arrangements/agreements.

Disturbed areas outside of the construction limits and/or slope intercepts and utilized for storage or access shall be protected with erosion controls and restored to the satisfaction of the Engineer upon completion of the project. All work regarding said storage, including but not limited to erosion controls and restoration, shall be considered incidental to construction.

7. UTILITIES

A. General

There are underground and overhead utility facilities located with project limits. The Contractor shall coordinate his construction activities with a call to Digger's Hotline as required per State Statute. The Contractor is encouraged to contact utility/facility owners to obtain current information on the status of an existing utility facility or any utility relocation work.

Prior to and concurrent with construction, utility companies may be upgrading and/or relocating facilities. Existing facilities are shown on the plans and are based upon information provided by utility companies. The Contractor shall coordinate all work with utility companies as pertinent to the Contractor's schedule of operation for the project. No damages or claims shall be made against the City due to delays by various utilities.

Utility work may be allowed to occur beyond staged construction limits, as approved by the City Engineer.

Utilities which are not specifically noted herein to be replaced shall therefore be assumed to remain in place, without disruption to service.

Utility Line Openings (ULO's), as specified in Section 4.1.6 of the Standard Specifications, may be required on the plans at locations of potential conflict as identified during the design. These ULO's will be paid for if specifically listed in the unit price schedule. The Contractor shall perform ULO's per plan and additional ULO's if desired or necessary to maintain production rates, at Contractor's costs (additional ULO's are considered incidental and will not be measured/paid for; nor will the quantity of the ULO bid item be increased unless specifically approved for payment by the City Engineer). Contractor shall comply with the requirements of Section 4.1.6 if ULO's are measured/paid for or incidental, required on the plans or additional work by Contractor.

It is possible that potential conflicts may be discovered during construction. The Contractor and Utility owner are ultimately responsible for discovery and resolution of all conflicts.

All costs associated with the discovery of utility facilities and/or conflicts along with protecting utility facilities, including but not limited to: utilization of special equipment and/or work procedures; loss of production; special protection devices such as sheeting, shoring, poling, timbers or supports; temporary removal and reinstallation; additional labor or equipment; repair/replacement of utility facilities any down time or delay; all coordination associated with utilities, and all material, labor, equipment, tools and incidentals necessary to complete the work, shall be incidental to construction.

Utility companies known to have facilities within the project area(s) include:

- City of Marshfield – Sanitary Sewer
- City of Marshfield – Storm Sewer
- Marshfield Utilities (MU) – Water
- Marshfield Utilities (MU) – Electric and Street Lighting
- Frontier Communications – Telephone
- Charter Communications – Cable
- WE Energies – Natural Gas

B. Sanitary Sewer

The City of Marshfield has existing sanitary sewer mains and laterals that are located within construction limits of projects as indicated in the plans. Mains and laterals will be replaced as designated for each project. The exact location of existing sanitary laterals is unknown, however,

the Contractor shall be responsible to locate, protect and repair (if disturbed) existing mains and laterals (to remain) as necessary.

- Sanitary sewer facilities will be replaced on the East 2nd Street Reconstruction Project, Central Avenue to Maple Avenue.

C. Storm Sewer

The City of Marshfield has existing storm sewer mains, leads and laterals that are located within construction limits of projects as indicated on the plans. Storm sewer facilities will be replaced as designated for each project. The exact location of existing storm mains, laterals and insulation is unknown, however, the Contractor shall be responsible to locate, protect and repair (if disturbed) existing mains and laterals (to remain) as necessary.

- Storm Sewer facilities will be replaced on the East 2nd Street Reconstruction Project, Central Avenue to Maple Avenue. Storm sewer laterals will be replaced on the alley project (bounded by Central/Chestnut/6th/5th).

D. Water Main

Marshfield Utilities (MU) – Water Department has existing water mains, valves, hydrants, leads, hydrant valves and service laterals that are located within the construction limits of projects as indicated on the plans. The removal and replacement of water main, valves, fittings, service laterals and curb stops is required (work by Contractor) where indicated on the plans for each project.

- Water Distribution facilities will be replaced on the East 2nd Street Reconstruction Project, Central Avenue to Maple Avenue.

E. Electric

Marshfield Utilities (MU) – Electric Department has underground and overhead facilities within construction limits. Major rebuilding or replacement is not anticipated, however adjustments may be necessary.

- Existing street lighting poles on East 2nd Street, Central Avenue to Maple Avenue, will be removed by Marshfield Utilities, prior to or concurrent with Contractor's work.
- On East 2nd Street (Central Avenue to Maple Avenue), there are existing underground conduits crossing the street at the alley. Marshfield Utilities estimates that the conduit package includes three 5-inch PVC conduits and one 2-inch conduit, encased in concrete and buried 3 to 4 feet below existing grade. These empty, unused conduits will be crossed by the Contractor's operations, and shall not be disturbed.

It is hereby noted that existing overhead electrical power lines may restrict/prevent the use of large/tall construction equipment and/or encumber the swing/operation of said equipment. MU may not be relocating said lines thus the Contractor shall be responsible for protection of and safety regarding all work in the vicinity of existing electrical power lines.

F. Telephone

Frontier Communications has existing underground (conduits, ducts, vaults, etc.) and overhead lines within construction limits of projects as indicated on the plans. Underground lines include vitrified clay ducts (probably encased/ covered with concrete) and multiple 'packs' of PVC conduits. Overhead lines include primary cables and services, supported on poles owned by Frontier and/or attached to poles owned by others (MU). Major rebuilding of Frontier's overhead

facilities is not anticipated; however, underground lines may conflict with proposed sanitary sewer, storm sewers, water mains and/or excavation and will require adjustment and/or replacement (via joint efforts of Frontier and Contractor), as discussed below.

- The plans for East 2nd Street (Central Avenue to Maple Avenue) show Frontier's underground facilities which could be in conflict with proposed facilities. Potential conflicts with existing underground telephone facilities may include: sanitary sewer and water mains paralleling telephone lines, storm sewers crossing telephone, storm sewer/pipe underdrain crossing telephone, excavation (for subbase and underdrains), etc. Conflicts may require relocation of telephone lines. Conflicts due to excavation may require additional work by Frontier such as removal of existing duct, direct bury or installation of new duct, relocation and/or protection of telephone facilities. Repair, rerouting and/or relocation of underground telephone facilities is likely and where this occurs Frontier is responsible for abandonment and/or removal of existing facilities, including conduits/ducts and vaults/structures.
- Frontier will likely be removing an old wood pole on the alley reconstruction project (bounded by Chestnut/Central/6th/5th). (Approximately 3 working days required)

The Contractor shall exercise extreme care when working near existing telephone facilities and shall utilize special equipment and/or work procedures to protect these facilities. The Contractor shall be responsible for any damage to said facilities and shall repair or replace said facilities to the satisfaction of the utility owner.

The Contractor shall coordinate with Frontier regarding discovery and resolution of conflicts and shall allow ample time and space for the telephone utility owner to construct, adjust and reconstruct and/or relocate facilities.

All costs associated with discovery and/or protecting telephone facilities, including but not limited to: utilization of special equipment and/or work procedures; loss of production; special protection devices such as sheeting, shoring, piling, timbers, or supports; additional labor or equipment; repair/replacement of utility facilities; any down time or delay; and all coordination associated with the existing telephone utilities, shall be incidental to construction.

Frontier Communications shall be responsible for: inspecting and rebuilding vaults if they are found to be in poor condition; inspecting and replacement of vault tops due to condition or grade changes; removal and disposal of waste materials such as riser rings; and installation of new riser rings in accordance with the City's standard specifications and details, including adjustment of covers/castings to final grade/cross slope.

The Contractor shall coordinate with Frontier for adjustment of these telephone manhole covers and any repairs. It is the Contractor's responsibility to verify adjustments made by the utility company owner. The utility shall be responsible for tuckpointing/back plastering of adjusting rings, along with all costs incurred regarding the adjustment of said castings/covers.

G. Cable

Charter Communications has overhead and underground facilities within/adjacent to construction limits of these projects. Major rebuilding, replacement or adjustment of Charter Communication's facilities is not expected for these projects.

The Contractor shall coordinate with Charter Communications regarding discovery and resolution of conflicts and shall allow ample time and space for the cable utility owner to construct, adjust, reconstruct and/or relocate facilities.

H. Natural Gas

WE Energies has underground facilities within the construction limits of these projects. Existing gas facilities may be in conflict with proposed storm sewer catch basins, pipe underdrain, conduits, bases and/or grading for road or sidewalk base(s).

WE Energies or their designated subcontractor will be reconstructing gas facilities within project limits as noted below, prior to and/or concurrent with construction. Gas reconstruction is expected to include abandonment and/or removal of existing steel gas mains, abandoning existing services in place (ends to remain shall be peened), installing new polyethylene mains and 1" polyethylene services, including all testing and connections as necessary. New mains and services can be installed via directional boring and/or open trench methods (City compaction requirements apply). Services will typically be installed to cross under pipe underdrains. All work by WE Energies that is to occur concurrent with construction shall be coordinated with the Contractor in accordance with these Special Conditions.

- At the alley reconstruction project (bounded by Chestnut/Central/6th/5th), existing gas mains and services will likely be replaced (approximately 10 working days required).
- At the East 2nd Street Reconstruction Project (Central Avenue to Maple Avenue), the existing gas main crossing 2nd Street at the alley will be replaced (approximately 5 working days required). Gas main replacement shall occur after removal of the existing storm sewer but before installation of pipe underdrain and subbase.

The Contractor shall coordinate with WE Energies regarding the discovery and resolution of any conflicts and shall allow ample time and space for the natural gas utility owner to remove, construct, adjust, reconstruct and/or relocate facilities, as necessary.

8. OBSTACLES

A. General

It is understood that the Contractor, by careful examination, is satisfied as to the nature and location of the obstacles to be encountered, requirements as dictated by the utility/obstacle owner, character of the equipment and facilities needed for prosecution of the project. All work associated with "Obstacles" shall be considered incidental to the project(s), unless specifically discussed or listed for payment elsewhere.

B. Utilities

Gas, power, cable TV and/or telephone poles, guys, pedestals or other utility items encountered as construction progresses, may require temporary removal, relocation and/or replacement. All costs associated with the temporary relocations, removal and reconnection of utility facilities will be at the Contractor's expense and no additional payment will be made for said work. Permanent removal of utility facilities shall be the responsibility of the utility Owners. The Contractor shall work with the utilities on the scheduling of any temporary or permanent relocation.

C. Sanitary Sewer Mains and Service Laterals

The Contractor will be required to keep a supply of materials on site to repair damaged sewer mains or laterals encountered during the construction. The materials include but are not limited to PVC sewer pipe, Fernco adapters, repair couplings, wyes, tees, etc. Failure to have adequate and proper materials on hand for timely repairs will not be grounds for any additional payments. Any damage to sanitary laterals, located or not located, shall be the responsibility of the Contractor.

Note: Fernco connectors are not allowed on PVC to PVC connections.

D. Street Signs (City)

Where necessary for construction within construction limits or replaced by a proposed permanent sign, the Contractor shall carefully remove existing street signs (and posts) and carefully haul to the City of Marshfield - Public Works – Street Division Sign Shop (101 South Oak Avenue). These signs include street names, stop, speed limit, etc. Temporary signs required for traffic flow shall be installed and maintained by the Contractor. Additional information and requirements are discussed elsewhere within these Special Conditions.

E. Miscellaneous Signs

Where necessary for construction, the Contractor shall remove, adjust and/or relocate (temporary or permanent) existing miscellaneous signs not owned by the City of Marshfield such that each sign is visible to intended parties/motorists. Upon completion of work in the immediate area of each sign, the existing miscellaneous sign shall be adjusted, moved and/or reinstalled to its original or proposed location. Removal and/or adjustment of signs shall be considered incidental to construction, however, removal with reinstallation shall be measured and paid for as discussed elsewhere within these Special Conditions.

F. Mail Boxes

For these projects, most of the existing mail boxes and newspaper receptacles are mounted to or within buildings. It is assumed that mail/newspaper delivery can be accomplished by carriers utilizing existing sidewalks, however, if carriers cannot safely access a property or receptacle then the Contractor shall provide suitable substitute temporary facilities (i.e. an individual mail box for each address/apartment affected, grouped at approved locations, etc.).

Temporary mail boxes may be supplied by the US Postal Service (USPS) if available at the time; however, these temporary facilities will ultimately be the Contractor's responsibility. Temporary facilities shall be in place at least one (1) week prior to removing sidewalk/access to allow USPS time to notify residents and label said temporary mail boxes. Locations and installation of temporary mail boxes shall be reviewed/approved by the USPS and the City.

Note: All requirements for mail boxes shall also apply to newspaper boxes and any other delivery receptacle.

All work under this section, including but not limited to all removal, relocation, replacement, temporary facilities, etc. shall be considered incidental to construction.

G. Trash Containers

The Contractor shall coordinate with trash and recycling companies such that there is no interruption of these pickup services. Temporary provisions may include dumpsters at central locations and/or carts at alternate sites. The Contractor shall carry/move trash/recyclable materials from properties inaccessible for pickup due to construction to temporary pickup facilities/locations.

H. Lawn Ornaments, Address Signs, Fence, Landscape Timbers/Borders, Etc.

Where necessary, these items will be carefully removed and salvaged for the Owner, or where necessary, stored, relocated and/or reinstalled by the Contractor. Installation and restoration will be "of kind" to the complete satisfaction of the Owner. Upon completion, these items shall be relocated to their original location or an approved location. This work shall be considered incidental to construction, unless specifically listed for payment in the Contract Unit Price Schedule.

I. Bollards, Protective Barriers, Retaining Walls, Etc.

The Contractor shall not disturb bollards or other protective barriers including retaining walls that are not designated for removal. Use extreme care when removing and replacing surfaces adjacent to these barriers. Protect said devices from any damage including damage from new concrete or asphalt materials (including sprays, splatter, etc.). This work shall be considered incidental to construction.

J. Sprinkler/Irrigation Systems

The Contractor shall coordinate with affected property owners and/or their designated sprinkler/irrigation system contractor/maintainer prior to performing any removals. Property owners are responsible to disconnect and disable said systems for construction and modify/reinstall systems after Contractor's completion of sidewalk/driveway construction but prior to restoration of turf. Contractor shall mark and protect system components when placing and preparing topsoil, and completing turf restoration work (Finished Terraces).

K. Right of Way Encroachments

The Contractor is notified that there are many right of way (R/W) encroachments on this project. Special measures and/or additional work may be required by the Contractor at these areas. Unless specified elsewhere in these Special Conditions and listed in the Unit Price Schedule all work, downtime/delay, etc. shall be considered incidental to construction. Known encroachments include:

1. Business and/or advertising signs and mountings (many locations). These items shall remain (do not disturb).
2. Awnings, canopies, etc. (many locations). These items shall remain (do not disturb).
3. Underground vaults (abandoned) may exist on East 2nd Street. These vaults shall be abandoned and filled as specified elsewhere within these Special Conditions, if encountered.
4. Many private buildings are partially located within R/W's. These encroachments will remain.
5. Steps, stairways, etc. are known to exist on this project and are labeled on the plans. Some steps will be eliminated by the proposed design/grades, however some will remain.
6. Entrance/Exit doors for some buildings may swing into the R/W. Known locations are shown on the plans. These encroachments will remain.

9. CONSTRUCTION STAKING

The City of Marshfield shall provide construction staking as described in the City's Standard Specifications (Section 1.4.3). The Contractor shall coordinate staking requirements with the City and provide at least 72 hours notice when requesting staking.

The Contractor shall provide any additional staking as necessary for construction of the projects.

10. PUBLIC INFORMATION MEETINGS

The Contractor will be required to attend Public Information Meetings (as required by Standard Specification 1.3.26) prior to the start of construction of each major construction stage for the project. The initial meeting(s) will be held prior to the start of construction and a second meeting(s) may be held at a later date if deemed necessary by the Engineer. At these Public Information Meetings the Contractor shall present the construction schedule, discuss access and answer questions from concerned residents.

In addition to the Public Information Meetings, the Contractor shall hold weekly Progress Meetings, intended to inform the City Engineer and/or businesses of project status, proposed work for the next week, potential impacts/access changes, etc. These meetings will be held at City Hall (room to be determined) during the work week (Tuesday or Wednesday) mornings (10:00 AM). The hour prior to these meetings shall be reserved for a City/Contractor meeting if necessary. Contractor's Superintendent and lead foreman shall be made available for all meetings.

11. PROJECT SIGN(S) REQUIRED

A project sign is required for this project in accordance with City Standard Specification Section 1.3.29. Installation, maintenance and removal thereafter of the project sign shall be considered incidental to construction.

12. SALES AND USE TAX EXEMPTION

Per recently enacted legislation (State Statutes 77.54(9M), Wisconsin Administrative Code Tax Rule 11.11, 2015 Senate Bill 227, 2015 Wisconsin Act 126), the Contractor (and all subcontractors and suppliers) are exempt from paying sales and use taxes of the State of Wisconsin and of cities and counties thereof on eligible materials, equipment and components to be incorporated into the work.

Eligible materials, equipment and components include the following categories of work:

- Storm Sewer, as specified under Sections 6 through 10 of the City's Standard Specifications. Storm Sewer pay items are also identified on the Proposal and Contract (i.e. unit price schedules) by Item Number; 6-XXX, 7-XXX, 8-XXX, 9-XXX and 10-XXX.
- Water Supply, as specified under Sections 10 and 19 of the City's Standard Specifications. Water Supply pay items are also identified on the Proposal and Contract (i.e. unit price schedules) by Item Number; 10-XXX and 19-XXX.
- Sanitary Sewer, as specified under Sections 8 through 10 and 20 of the City's Standard Specifications. Sanitary Sewer pay items are also identified on the Proposal and Contract (i.e. unit price schedules) by Item Number; 8-XXX, 9-XXX, 10-XXX and 20-XXX.

Eligible Pay Items:

- 6-XXX Storm Sewer
- 7-XXX Storm Structures
- 8-XXX Manhole, Catch Basin, Area Drain and Inlet Covers
- 9-XXX Adjustment and Reconstruction of Manholes, Catch Basins, Area Drains and Inlets
- 10-XXX Removing and Abandoning Structures and Pipes
- 19-XXX Water Main and Services
- 20-XXX Sanitary Sewer and Manholes

Said sales and use taxes shall not be included in the Contractor's material cost/unit price for eligible items. This tax exemption does not apply to:

- Construction tools, machinery and equipment.
- Other 'property' purchased by or leased by the Contractor.
- Materials, equipment and components not incorporated into the work.
- Materials, equipment and components which are not described or listed as eligible categories or items.

The City of Marshfield will furnish certificates of tax exemption to Contractor for use in the purchase of tax exempt eligible items to be incorporated into the work upon request.

13. TERRACE AND PRIVATE TREES

There are existing trees of various species, size and age located within construction limits. The City and property owners are very concerned about the welfare of these trees. The Contractor shall be required to exercise extreme care when working near the trees so as not to damage roots, branches, limbs, trunk, bark, etc. No trees shall be removed without prior written authorization by the City Engineer.

Terrace and/or private trees which are removed without approval or severely damaged due to careless construction operations may result in the assessment of damages or reduction of payment to the Contractor, intended to compensate the City or the property owner through the City, for the loss of said tree. If a tree is damaged or injured, it shall be repaired immediately including but not limited to cutting/trimming roots, branches and limbs. (Make all cuts immediately above the bark ridge and branch collar to leave the ridge and collar intact for healing.) Bark on tree trunks shall be repaired through application of an asphalt based wound dressing or wrapped with a 2-ply waterproofed crepe tree wrapping paper laminated with a layer of pliable asphaltic material secured with biodegradable tape. All work shall be in accordance with acceptable forestry practices and approved by the City Forester or Engineer.

Grading and finished terrace work may require blending/rounding of the finished grade around trees. Turf surfaces shall be shaped to match the tree trunk and properly cover roots ultimately resulting in an easily maintainable/mowable turf surface.

14. REMOVAL AND DISPOSITION OF EXISTING MATERIALS

Materials designated to be removed (and salvaged for future use by the City) shall be removed, segregated and hauled by the Contractor to the City of Marshfield Public Works – Street Division Material Storage yards at either 2600 South Vine Avenue, or the 'Old Landfill' (east side of Lincoln Avenue at Airport Road) and deposited in the appropriate stockpile. The City shall be responsible for maintaining all materials stockpiles. The Contractor shall be responsible for disposal of existing materials at an alternate site if storage space at city sites is exhausted. Removal (and salvage) shall be in accordance with the Special Conditions and the City's Standard Specifications for Public Works Construction. When disposing materials at alternative or private sites, the Contractor is responsible for all legal and monetary obligations; for obtaining permits; and for compliance with all permit conditions, laws, rules and ordinances. All unsuitable materials and materials not specifically discussed herein or the City's Standard Specifications shall be disposed of by the Contractor (incidental to construction).

- A. Asphalt surfaces (including asphalt overlay, approaches, driveways, etc.) shall be deposited at the City's Vine Avenue materials storage yard (paid per Remove Asphalt Surface per S.Y).
- B. Concrete, rock and boulders shall be deposited at the City's Vine Avenue materials storage yard (paid per removal specifications per square yard or lineal foot).
- C. Surplus topsoil (suitable materials, may include sod, relatively free of contaminants/debris) shall be deposited at the 'Old Landfill' site (incidental to construction).
- D. Excavation – excavated fill materials shall be used on the project site in accordance with the grading plan. Unsuitable materials or surplus excavation shall be disposed of by the Contractor. Disposal of surplus excavation materials shall be considered incidental to construction. It is hereby recognized that disposal of unsuitable surplus excavation as described herein is the Contractor's responsibility, independent of City oversight or control, however, the Contractor shall provide documentation that demonstrates the disposal site property owner(s) are satisfied that the Contractor has fulfilled his obligation(s) to said property owner(s).

15. CAUTION – DO NOT DAMAGE EXISTING UTILITIES TO REMAIN

The Contractor is hereby notified that there are existing municipal and private utilities that are to remain lying beneath existing pavements that are designated to be removed. Some of these existing utilities are shallow (such as existing traffic control conduits, etc.) and may be exposed during construction. Sanitary and/or storm sewers and manholes (to remain) are located within the construction limits. The Contractor shall be extremely careful not to damage these utilities (during pavement breaking/removal, excavation, etc.) and will be responsible for said damage and repairs.

16. REMOVAL OF EXISTING (STREET) PAVEMENT AND CURB {EAST 2ND STREET RECONSTRUCTION PROJECT}

East 2nd Street has an asphalt surface (2" to 4" typical) overlaid upon the original concrete or brick pavement (4" to 8" typical), possibly built with (modular) combination curb and gutter, curb or integral curb, with continuous reinforcement or mesh. The exact thickness and composition of existing pavements is unknown.

The Contractor is required to remove the asphalt pavement separately in accordance with Section 3 of the Standard Specifications (measured and paid for as Remove Asphalt Surface per SY). The underlying concrete/brick pavement shall also be removed in accordance with Section 3 however the square yard measurement shall include the curb/gutter (width measured from back-of-curb to back-of-curb). Removing concrete curb and/or curb and gutter will not be measured for payment unless said curb/curb and gutter is distinctly separate from the street (most locations are outside of the right-of-ways).

Asphalt, concrete and brick materials shall be hauled to the City's Vine Avenue materials storage yard (per Special Conditions), separately and deposited at the appropriate piles. Brick pavers shall be handled as delicately as possible (proposed to be reused by others – charities and civic organizations).

The Contractor shall use caution to prevent damage to existing concrete pavement to remain. If concrete pavements less than 5 years old are damaged, Contractor shall replace full panel/entire width at Contractor's cost.

Break-up of existing concrete pavements shall be done in a manner that does not impact or adversely affect existing buildings, building foundations, utilities, etc.

17. MANAGEMENT OF CONTAMINATED SOIL {EAST 2ND STREET RECONSTRUCTION PROJECT}

This work consists of excavating, segregating, loading, hauling and disposing of petroleum-contaminated soil to the nearest Department of Transportation and Department of Natural Resources approved treatment and disposal facility. A nearby approved facility is Advanced Disposal's Cranberry Creek Biopile facility at 2510 Engle Road, Wisconsin Rapids, Wisconsin. This work shall conform with the requirements of the Standard Specifications; with pertinent parts of the Wisconsin Administration Code, Department of Natural Resources Environmental Investigation and Remediation of Environmental Contamination, Chapters NR 700-736; and as shown on the plans and as supplemented herein. Per NR 718.07, a solid waste collection and transportation service operating license is required under NR 502.06 whenever contaminated soils are transported.

The City has conducted testing for petroleum soil contamination. The locations of environmental soil borings and soil sampling are shown on the plans and copies of the complete Phase 1 and Phase 2 environmental investigation reports are available upon request from OWNER. Testing indicated that petroleum-contaminated soil is present at the following locations as shown on the plans:

1. 111 East 2nd Street (Curves), petroleum contamination is present within the 2nd Street right-of-way. It is possible that a leaking underground storage tank may be present at this site. Analysis of soil borings indicated that concentrations do not exceed direct contact standards. Depth and strength of contamination may vary however planned removal/management of these contaminated soils shall include all trenching lower than 4-feet below the existing pavement.

In each of these areas, previous Phase 2 investigation sampling identified soil contamination. The following petroleum-related contaminants were detected in the soil at levels exceeding state standards: gasoline range organics (GRO), diesel range organics (DRO), petroleum volatile organic compounds (PVOs), polycyclic aromatic hydrocarbons (PAHs), and lead. Historic land uses in these areas included petroleum storage and transfer/transportation. All excavated contaminated soil from these areas shall be managed for off-site treatment and disposal at the approved treatment and disposal facility.

The City of Marshfield's Environmental Consultant for this project (Phase I and II investigation) is:
MSA Professional Services Inc. (Richard Lyster)
1230 South Boulevard
Baraboo, WI 54923
800/362-4505

At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the Environmental Consultant. Also notify the City Engineer at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as require by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the City Engineer prior to the start of work.

Petroleum-contaminated soil shall be managed for off-site treatment and disposal. The Environmental Consultant may determine which soils will be taken to the treatment and disposal facility on the basis of previous investigation results, field observations, and field-screening of soil during excavation.

Contaminated groundwater is not expected to be encountered (dewatering is not anticipated). If groundwater is encountered and found to be contaminated it shall be handled as approved or directed by the City Engineer. Ultimately, contaminated groundwater may be directed to the sanitary sewer system however written approval is required by the City Engineer and Wastewater Superintendent.

Excavated soil may be periodically examined by the Environmental Consultant. The Contractor shall assist the Environmental Consultant in collecting soil samples using excavation equipment. Soil samples shall be collected by the Environmental Consultant from the bucket of the excavation equipment. The sampling frequency shall typically not exceed one sample for every 10 cubic yards excavated. Following field screening of soil, the Environmental Consultant shall identify contaminated soils to be transported to the approved disposal facility and notify the Contractor if the excavation can be backfilled. Field screening of soil is expected to take up to 10 minutes for each sample. Soils designated by the Environmental Consultant as contaminated shall be hauled directly to the approved treatment and disposal facility.

Coordinate with the City Engineer to ensure that the Environmental Consultant is present during excavation activities in the contaminated areas if necessary. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

To minimize the quantity of excavated contaminated soil and protect worker safety, Contractor shall provide and use a trench box during soil excavation/trenching activities.

The Contractor shall carefully segregate clean soils from contaminated soils, horizontally and vertically. This may result in a loss of production. The Contractor's progress schedule and unit price shall account for this loss of production.

The Contractor shall be responsible for verifying that vehicles used to transport contaminated soil are licensed for such activity in accordance with applicable state and federal regulations. Petroleum-contaminated soils hauled by trucks shall be covered during transport.

The Contractor is responsible for all coordination with the selected treatment and disposal facility, completing waste manifests, and scheduling the transfer and acceptance of contaminated soil at the approved treatment and disposal facility.

The City will be responsible for completing any required waste characterization forms, collection and analysis of additional soil samples if required by the treatment and disposal facility, obtaining facility approval and signing waste manifests as the Generator of the waste.

Prior to transporting contaminated soil to the treatment and disposal facility, Contractor shall sufficiently dewater contaminated soils to eliminate free liquids.

The Contractor shall not transport contaminated soil off-site without approval of the City Engineer and notification to the disposal facility.

Management of petroleum-contaminated soil shall be measured by the Ton of contaminated soil hauled to and accepted by the treatment and disposal facility and as documented by load tickets generated by said facility.

Payment at the Contract Unit Price shall constitute full compensation for all work described or implied herein, including but not limited to excavating, assisting the Environmental Consultant with sampling/testing, segregating, stockpiling, loading, transporting, completing waste manifests, downtime/delay/loss of production and for furnishing all labor, tools, equipment and incidentals necessary to complete the work in accordance with the contract.

The City of Marshfield will be responsible for treatment and disposal costs for contaminated soils from this project and will pay invoices generated by the approved facility directly to said facility.

18. MONITORING WELLS {EAST 2ND STREET RECONSTRUCTION PROJECT}

Several groundwater Monitoring Wells are present within and adjacent to the East 2nd Street (Central Avenue to Maple Avenue) Reconstruction Project construction limits. All existing Monitoring Wells are believed to be abandoned (filled with bentonite).

Monitoring Wells shall be removed by the Contractor when encountered during normal construction operations. Castings shall be salvaged for the City, however, all other well components/materials shall be removed (to the depth as encountered) and disposed of by the Contractor.

All work associated with locating and removing groundwater Monitoring Wells as described or implied herein shall be considered incidental to construction.

19. EXCAVATION BEHIND CURB {EAST 2ND STREET RECONSTRUCTION PROJECT}

As indicated on the Typical Sections and Cross Sections for the East 2nd Street (Central Avenue to Maple Avenue) Reconstruction Project, the cut slope beyond curb that abuts sidewalk is not vertical, but is sloped up. The Contractor is hereby notified that accomplishing this cut-slope may require additional/special work or operations.

Where sidewalks abut proposed curb, driveway construction will require additional excavation (necessary to provide required thickness of new driveway materials). This additional excavation must be done prior to placing/spreading any gravel base for sidewalks.

20. COMPACTION

All disturbed, placed, imported (bedding, cover and/or backfill) or exposed soil or aggregate material shall be compacted in accordance with Section 4 of the Standard Specifications. Wet soil shall be removed/replaced or processed such that moisture/water content facilitates compaction to comply with density requirements.

Special compaction equipment will be required throughout the project. Use equipment which accomplishes compaction goals without damaging buildings and foundations abutting the project.

The Contractor shall compact/proof-roll areas where underground utility work occurred by others, including installation of new underground facilities or removal of existing facilities. This work shall be considered incidental to construction of the project.

21. SALVAGE AND RE-SPREAD EXISTING GRAVEL {1ST & CEDAR INTERSECTION RECONSTRUCTION PROJECT}

This work shall consist of salvaging the existing gravel surface material, temporarily storing the material, and re-spreading this material following completion of proposed roadway excavation.

Where necessary to make up lost volume of said gravel, the imported material shall be Base Aggregate Dense 1-1/4". If the existing gravel material becomes unsuitable for reuse due to contamination from native soils/deleterious materials or other reasons beyond the City Engineer's control, the Contractor shall supply/make-up the volume necessary for replacement.

Upon completion of proposed excavation, the existing salvaged or imported gravel material shall be re-spread/placed and compacted in accordance with the Standard Specifications.

Salvage and Re-Spread Existing Gravel shall be measured per Square Yard based upon surface area as measured.

Salvage and Re-Spread Existing Gravel shall be paid for at the contract unit price per Square Yard and said payment shall be considered full compensation for segregating, salvaging, removing, loading, hauling, temporary storing, protecting, re-spreading, placing, compacting, shaping, furnishing imported/make-up materials and disposal of waste, along with all materials, labor, tools, equipment and incidentals necessary to complete the work.

22. MAINTAIN EXISTING STORM SEWER AND DRAINAGE

The Contractor shall maintain drainage and a functioning storm sewer system throughout construction (as required by standard specification Section 1.3.24). Where the existing storm sewer pipe or structures are removed for replacement or to accommodate other work such as installation or

removal of sanitary sewers, water main, storm sewers, other underground utilities and/or service lines, temporary pipes and/or structures of sufficient capacity shall be installed by the contractor. Temporary facilities shall include soil-tight connections and shall not allow debris/materials into downstream sewers. Maintaining existing storm sewers and drainage, including temporary facilities and temporary connections shall be considered incidental to construction of the project.

23. TRENCH PLUGS/CLAY DAMS

The Contractor shall be required to install Trench Plugs/Clay Dams in lieu of normal bedding and cover materials at locations shown on the plans, noted within the Standard Specifications and these Special Conditions. Locations for Trench Plugs/Clay Dams shall include:

- Sanitary Sewer Mains – at approximately 20' upstream of manholes.
- Sanitary Sewer Mains and Laterals – at limits of contaminated soil areas.
- Storm Sewer Mains, Leads and Laterals – at limits of contaminated soil areas.
- Water Mains and Services – at limits of contaminated soil areas.

Trench Plugs shall be constructed using suitable native clay material, placed in layers not exceeding 8-inches when loose, compacted by hand (using vibrator rammer/tamping plate, etc.), extending 6 lineal feet along the pipe and full width of the trench, in lieu of bedding/cover materials. Trench Plug/Clay Dam material shall be placed around the pipe(s) without voids and without damaging the pipe.

All work associated with Trench Plugs/Clay Dams, including materials, placing, compacting, downtime/delay/loss of production, along with all labor, tools and equipment shall be considered incidental to construction and will not be measured/paid for separately.

24. SEWER LATERAL TELEVISIONING

The Contractor is hereby notified that many of the existing sanitary and/or storm sewer laterals on this project will require televising to determine their status and/or condition. Lateral televising will be done by City staff as described in the Standard Specifications, however, all televising shall occur and be completed during normal work hours (Wastewater staff normal work hours 7:00 AM – 3:00 PM, Monday through Friday, excluding holidays). Coordinate with the City's Wastewater Utility such that televising can be planned, scheduled and accomplished without downtime or delay for the Contractor.

25. SEWER LATERALS AND BUILDINGS WITHIN 5-FEET OF RIGHT-OF-WAY

For buildings and/or (live) foundation walls located on or within 5-feet (outside) of the right-of-way, the Contractor shall replace as much of the lateral pipe as possible. Contractor shall carefully expose the lateral pipe, utilizing hand/shovel methods to avoid damaging said pipe or foundation wall. Connect to the existing lateral pipe (as described in the Standard specifications) within 12-inches of the face of said foundation wall.

26. PRIVATE SANITARY AND/OR STORM LATERAL REPLACEMENTS

The City has encouraged property owners abutting this project listed above to replace private sanitary and/or storm laterals in conjunction with the construction of this project. The Contractor shall coordinate with each private property owner's plumber such that the sewer laterals can be replaced on the private property, through the foundation wall of the building if possible (without the need for a Fernco adaptor or interruption of service). This may require extensive scheduling, coordination, staging, delays, downtime or other inconvenience to the Contractor. The City will assist if necessary to minimize said inconvenience as much as possible.

All costs associated with or contributing to staging and coordination issues discussed herein, implied or otherwise shall be considered incidental to construction. This shall include but not be limited to maintaining sanitary sewer/storm services, temporary connections (and removal thereafter), repeating or overlapping work or operations, loss of production, downtime and delay, as well as all additional measures not included in other sewer pay item work, along with all materials, labor, tools, equipment, and incidentals necessary to complete the work.

27. REMOVE FOUNDATION WALL

The Contractor will be required to carefully remove foundation walls at known and/or previously unknown vault locations on these projects.

Removing Foundation Walls includes but is not limited to the following:

- Excavate and expose foundation walls.
- Saw, hammer, and crack existing walls to be removed to separate from live walls to remain. Contractor shall be responsible for repairing any live walls (to remain) that are damaged as a result of this work.
- Saw, hammer, crack, break, etc. and therefore remove existing foundation wall(s).
- Foundation walls shall be removed to at least 5-feet below finished grade or deeper if required for installation of sewer or water lines.
- Backfill and compact the excavation using suitable native materials (per Standard Specifications).

Note: The volume of fill material to replace the wall volume is incidental to this item of work.

Note: The existing materials and thicknesses of foundation walls are unknown and may vary greatly.

Remove Foundation Wall will be measured per Square Foot of foundation wall removed, measured along the centerline of each wall.

Payment will be made at the contract unit price and shall be considered full compensation for all work as described or implied herein, including but not limited to sawing, hammering, cracking, breaking, protecting, removing, pumping (groundwater), backfilling, compacting, disposal of waste and clean-up, along with all mobilization, labor, tools, equipment and incidentals necessary to complete the work.

28. ABANDON VAULT

If encountered, the Contractor shall abandon underground vaults, remove foundation walls and backfill per these Special Conditions.

Building owners shall be responsible for:

- Removal of contents/items.
- Disconnection of electrical lines (typically lighting).
- Plumbing modifications (such as relocation of water meter, sump pump, etc.).
- Blocking/sealing doorways/openings between the vault and building (including removal of doors/frames), which are to be suitable for backfilling against.
- Improvements to the exterior of the foundation wall such as insulation, waterproofing, etc.

Abandon Vault work shall typically include but not be limited to the following:

- Isolate the existing vault roof/top from the adjacent building or other structures if present by full depth sawing as close to the building as possible.
- Remove (and dispose off-site) the existing vault roof/top.
- Break/crack the existing vault floor into sections to allow moisture to pass through. Do not damage adjacent building walls or floor. Contractor shall be responsible for repairing any live

- walls (to remain) that are damaged as a result of this work.
- Allow sufficient time for the property owner to perform the following:
 - Remove door/frame and build wall/block-off the opening.
 - Install waterproofing.
 - Install Insulation.
- Remove the vault walls to at least 5-feet below finished grade. This work will be measured and paid for separately, per Remove Foundation Wall per Square Foot, as discussed elsewhere in these Special Conditions.
- Fill the abandoned vault space up to subgrade using suitable native materials (backfilling and compaction per Standard Specifications requirement, volume of fill material is included with the Earthwork quantity measured/paid per CY).

Abandon Vault shall be measured per Square Foot of vault roof area.

Payment will be made at the contract unit price and shall be considered full compensation for all work as described or implied herein including but not limited to sawing, excavation, removal, breaking/cracking, protecting, pumping (groundwater), backfilling and compaction, disposal of waste and clean-up, along with all mobilization, labor, tools, equipment and incidentals necessary to complete the work.

Note: Remove Foundation Wall and Earthwork (Fill) will be measured and paid for separately.

29. ABANDON PULL BOX {WEST 2ND STREET RECONSTRUCTION PROJECT}

The existing traffic signal loop detector pull box at STA 22W+50 Rt 6' shall be abandoned as follows:

- Core drill a 16-inch hole through concrete pavement around the cover frame.
- Cut existing corrugated metal pull box 2-inches below the bottom of the concrete pavement (10-inches below surface).
- Remove existing wire.
- Cap or plug existing PVC conduits within the pull box.
- Fill the box and void using open graded base aggregate. Hand tamp this material to achieve proper compaction.
- Install three drilled tie bars in the concrete pavement, #4 x 8-inch (epoxy coated) at 120° spacing, per requirements for drilled tie bars (epoxy required). Wash/clean the hole and apply bonding agent.
- Pour concrete per concrete pavement requirements (finish, cure, etc.).
- Deliver salvaged cover to the City Garage.

Abandon Pull Box shall be measured and paid for per Lump Sum.

Payment shall be made at the Contract Unit Price and shall constitute full compensation for all work and materials as described or implied herein, including but not limited to coring and drilling holes in concrete pavement, furnishing and placing all materials (conduit caps/plugs, open graded base, tie bars, concrete, etc.), installation, and disposal of waste, along with all labor, tools, equipment and incidentals necessary to complete the work.

30. WATER MAIN REMOVAL {EAST 2ND STREET RECONSTRUCTION PROJECT}

All existing water main that falls in the same trench as any proposed item shall be removed. The removal of the water main shall be considered incidental to the construction of the proposed item.

When the existing water main piping leaves the trench of the proposed item, the existing water main shall be abandoned in place and have a bulkhead installed per the detail in the plan set.

31. REMOVED FITTINGS {EAST 2ND STREET RECONSTRUCTION PROJECT}

All fittings removed from the Central Avenue connection locations during the construction project shall be property of Marshfield Utilities. Fittings shall be delivered to the Oak Avenue office.

32. REMOVE SIGNAL/POLE BASES {2ND STREET RECONSTRUCTION PROJECTS}

Existing concrete signal and/or street light bases shall be removed by the Contractor where indicated on the Plans. Signals and light poles (and fixtures) will be removed by others. Sizes, thickness, diameter, depth, reinforcement, etc. of existing bases will vary. Note: Removal of existing pull boxes and conduits shall be considered incidental to construction within the excavation limits on street reconstruction projects.

Removal of bases shall comply with Sections 10 and 22 of the Standard Specifications.

33. REMOVAL OF EXISTING SANITARY AND/OR STORM SEWER LATERAL

Removal of existing sanitary and/or storm sewer lateral pipes shall be in accordance with Section 10 of the Standard Specifications. Said removal is incidental where new pipe/structure installation is required. As shown on the plans there are several sewer laterals presently connected to existing sanitary sewer or storm sewer mains which are designated to be replaced as part of this project. The Engineer and Contractor shall determine the status of each said lateral found and if determined to be 'dead' the lateral shall be removed. Removal of said laterals shall comply with and be measured/paid for in accordance with Section 10 of the Standard Specifications. Where said laterals are found to continue beyond the right-of-way or project limits, said pipe shall be bulkheaded in accordance with Section 10 of the Standard Specifications (construction, measurement, payment, etc.).

34. CONCRETE AND CONCRETE PAVEMENT

Concrete streets and alleys are intended to be quality, long-life concrete pavements, with concrete supplied from an automatic batching plant.

Designs (pavement grades) typically include many intermediate cross-slope changes, offset crowns, etc., as necessary to match existing features and provide adequate drainage. Cross-slopes and warps are shown on the pavement grades plan sheets – the concrete pavement Contractor/Subcontractor's personnel (superintendent and foreman) must have copies of these plans with them when on the job site. Do not adjust grades if said adjustment would remove/alter a designed cross-slope/warp. The Engineer will stake every 25-feet with occasional 'break points' in between, and the Contractor shall provide pins at all of the Engineer's stakes.

The proposed width of concrete pavement(s) varies. The Contractor shall seamlessly accommodate varying widths.

The Contractor shall provide temporary gaps in the concrete pavement if required for access. Gaps shall be located in conformance with the jointing plan (do not create additional joints because of a gap). Locations where gaps will be required are unknown at this time, and gaps will only be allowed/required where there are no other acceptable access alternatives. Concrete pavement at gaps, including dowels and/or tie bars, shall comply with all concrete pavement specifications. All

work associated with concrete pavement gaps (including dowels and/or tie bars) shall be considered incidental to construction. Concrete pavement within the gap shall be measured and paid for similar to the adjacent concrete pavement.

Mix Design requirements (in addition to the Standard Specifications, Section 11A(e)) shall include:

- The water to cementitious material ratio shall not exceed 0.40 ($W/Cm \leq 0.40$).
- The concrete mix shall utilize fly ash as a replacement for Portland cement (replacement ratio in pounds of 1:1) at 20% minimum replacement, and up to 30% if approved by the City Engineer.
- Use of a mid-range water reducing admixture is necessary to attain workability without exceeding the W/Cm limit.

Note: These requirements apply to all concrete used on the project, regardless of the type/use or method of placement.

Batch tickets will be required with every load delivered to the jobsite so that the Contractor/Foreman and Engineer can verify the W/Cm ratio. Tickets shall clearly indicate the W/Cm ratio, or indicate the individual weights (in pounds) of mix water, aggregate free moisture, cement, and fly ash such that the W/Cm ration can be quickly determined in the field. If possible, indicate the amount of water that can be added on-the-job on each batch ticket.

The concrete producer shall conduct frequent moisture testing of the aggregates at the plant/stockpile location. Immediately prior to each day's pour, determine the fine and coarse aggregate moisture content(s). During each pour (unless measured/monitored automatically by the plant), determine fine aggregate moisture content at half-hour intervals (one test every one-half hour) or every-other truck load, whichever interval is longer. Utilize moisture content test results to adjust the batch weights such that the targeted W/Cm ratio is maintained and not exceeded.

Ready-mix trucks if utilized shall accurately measure water (in gallons, pounds or other units if appropriate). Sight-glass type measurement is acceptable, however each truck to be used on the project shall be field calibrated prior to the first use/pour. Any and all water added (in-transit or on the job) shall be recorded on the batch ticket. **All wash water shall be removed from the truck/drum prior to loading.**

The Contractor is responsible for testing of concrete in accordance with Section 11 of the Standard Specifications (Section 3.8 of the WCPA Specification). Compressive strength test cylinders must include caps and shall be labeled as follows:

City of Marshfield Contract 2016-01 Cylinder No. _____
 Plan No. _____ Project No. _____
 Date Cast _____ Test Age: Opening 7-day 28-day
 Type: Pavement Curb & Gutter Driveway Curb Ramp Sidewalk Other
 Sample Location: _____
 Field Test – Slump _____" Air _____% Temp _____°F By _____

Contractor and the concrete pavement subcontractor shall hold a pre-pour meeting arranged by the Engineer, at least one week prior to each substantial pour.

All (non-colored) concrete surfaces shall be properly spray-cured, using a WisDOT approved batch of **TK Tri-Kote 26 White** (white pigment required) curing compound.

Comply with all other requirements for concrete pavement per Section 11 of the Standard Specifications and these Special Provisions.

35. COLORED CONCRETE

Construct colored concrete crosswalk (8-Inch, colored concrete pavement) and/or colored concrete sidewalk in accordance with the Special Conditions, Sections 11 and 15 of the Standard Specifications, as shown on the plans and hereinafter provided.

Colored Admixture for Integrally Colored Concrete shall include:

- The color of the concrete shall match Solomon Colors 'Dark Redwood' (489 red, 1 bag/25 lbs. per 1 yard). Provide color sample to the City Engineer for approval. Add colored admixture to the mix per manufacturer's written instructions in a pre-measured bag; do not add by weight of cement content.
- Admixture shall be a colored, water-reducing, admixture containing no calcium chloride with coloring agents that are lime proof and UV resistant.
- Colored admixture shall conform to the following:
 ACI 303.1-97 – Standard Specification for Cast-In-Place Architectural Concrete.
 ASTM C979 – Standard Specification for Pigments for Integrally Colored Concrete.
 ASTM C494 – Standard Specification for Chemical Admixtures for Concrete.
 AASHTO M194 – Chemical Admixtures
- As constructed colored concrete surfaces shall match existing colored concrete surfaces as previously constructed within the downtown area.

Curing Compound for Integrally Colored Concrete shall comply with ASTM C1315 Type I, Clear, and be approved by color additive manufacturer for use with colored concrete.

Concrete: No calcium chloride shall be used. The slump shall not exceed 4-inches. Supplemental admixtures, such as additional water-reducing admixtures, water-proofing agents, and super plasticizers shall not be used. Do not add water to the mix in the field. Comply with mix design and batch ticket requirements as specified within these Special Conditions for Concrete Pavement.

Prior to placing any colored concrete, a mock-up must be provided and approved by the City Engineer. Install a mock-up area, with minimum dimensions of 3 ft. x 3 ft. adjacent to an existing colored concrete crosswalk, for Engineer's use to determine/approve color and texture.

Colored concrete pavement at crosswalks shall be constructed as described herein, unless alternate methods are approved by the City Engineer:

- Mainline pavements shall be placed using fixed-form methods, or slip-form paving machines as specified elsewhere, including paving through crosswalk areas (with normal/uncolored concrete).
- Do not place dowel baskets at these mainline/crosswalk transverse joints.
- Saw cut (full depth) and remove concrete pavement at the crosswalk.
- Colored concrete crosswalks which are not within slip-formed paving areas shall be constructed via normal manual fixed-form methods.
- Construct colored concrete crosswalk pavement, including installation of dowels, ties, etc.
- Consolidate using a vibrating screed and pencil vibration.
- Concrete mix design shall comply with the Special Conditions except the desired entrained air content shall be 7% ±1.5%.
- HES concrete will not be allowed under any circumstances.
- All surfaces shall be finished uniformly with a broom finish. Pull the broom across freshly floated concrete to produce a medium texture in straight lines perpendicular to the main direction of pedestrian traffic.
- Apply curing compound for colored concrete in accordance with the manufacturer's instructions using manufacturer's recommended application techniques and applied at consistent time for each pour to maintain close color consistency. Cover the fresh concrete with white plastic sheeting immediately following application of the curing compound.
- Seal all (crosswalk) joints as specified elsewhere.

- Surface testing (colored concrete crosswalks) shall comply with the requirements of Section 11 of the Standard Specifications however where corrections are required they shall only be remedied by removal and replacement of the entire crosswalk (centerline to gutter flagline).

All sawing, removal, drilling, dowels, ties, etc. shall be considered incidental to the colored concrete crosswalk item.

Colored Concrete Crosswalk 8-Inch, shall be measured by the Square Yard and in accordance with Section 11 of the Standard Specifications.

Colored concrete sidewalk of varying thicknesses shall be measured by the square foot and in accordance with Section 15 of the Standard Specifications. Reinforcement is required for driveway and/or alley approach locations.

Payment shall be made at the Contract Unit Price and shall constitute full compensation for all work and materials as described or implied herein, including but not limited to furnishing and placing all materials, including color pigment, mock-up area and finishing; and for all labor, tools, equipment and incidentals necessary to complete this item of work.

36. TREAT AND SEAL NEW CONCRETE PAVEMENT JOINTS

All concrete pavement joints to be sealed (i.e. all horizontal joints within a street or alley, including periphery joints) shall be treated with silane prior to sealing. 'Treating' concrete pavement joints shall be as described herein, however sealing concrete pavement joints is described in Section 11-C of the Standard Specifications.

Vertical surfaces of sawed joints shall be treated with a deep penetrating silane water repellent, TK-Tri-Silane 590-1 MS (TK590-1MS) as produced by TK Products, Inc.

Prior to treating, concrete pavements shall be swept clean. Joints shall then be cleaned, including resawing (green blade) if necessary, and then pressure washed at pressures sufficient for thorough cleaning (3500 psi). Allow sufficient time for all surfaces to dry, 24-hours minimum, prior to treating.

Apply silane treatment directly to the interior of the sawed joint using a cone shaped applicator tip designed for this purpose. Do not use the broadcast spray method of application. Comply with manufacturer recommendations. Application/coverage rates will vary however only a single coat is anticipated.

Caution: Silane is a solvent, and will soften or remove concrete curing compound, pavement markings, hot-poured (tar) sealants and some asphaltic surfaces.

Seal joints (per Section 11-C of the Standard Specifications) no sooner than 24 hours after treating.

Treat and Seal Concrete Pavement Joints shall be considered incidental to construction and will not be measured or paid for separately.

37. ASPHALT PAVEMENT BY OTHERS

Asphalt pavement for side roads, driveways, aprons, parking lots, etc., is not included under this contract but will be done by others (a private contractor under the City of Marshfield's 2015 Asphalt Pavement Contract). Fine grading/shaping of the aggregate base shall be the Contractor's responsibility (incidental to construction). The Contractor shall coordinate with the City's asphalt contractor to accomplish asphalt paving/patching in a timely matter with a minimal number of mobilizations. Failure to coordinate this work or otherwise complete it in a timely manner will not be

considered as grounds for warranting a contract time extension. All work by the Contractor in regards to this work shall be considered incidental to construction.

38. INSTALL DETECTABLE WARNING FIELD

The Contractor shall be responsible for installing Detectable Warning Field materials at curb ramps, as required per project plans and specifications. All Detectable Warning Field materials will be provided by the City (new materials (pre-oxidized) purchased prior to bidding this project). DWF's shall be cast iron panels as manufactured by Neenah Foundry Co. These materials will be stored at the City Garage (407 West 2nd Street). The Contractor shall load and transport DWF's from the City Garage to the jobsite. Some assembly may be required. Installation shall comply with pertinent plans, details and the Standard Specifications.

The size/width of the DWF will vary per project as listed below:

- A. Oak Avenue Sidewalk Reconstruction: 2' x 5'
- B. Alley Reconstruction: N/A
- C. 1st & Cedar intersection: 2' x 5'
- D. West 2nd Street Reconstruction: 2' x 4'
- E. East 2nd Street Reconstruction: 2' x 4'

Install Detectable Warning Field shall be measured per Square Foot of DWF, assembled and successfully installed. Payment shall be considered full compensation for all loading, hauling, storing, protecting, assembly, installation, disposal of waste and clean-up, along with all mobilization, labor, tools, equipment and incidentals necessary to complete the work.

39. SPECIAL GRADES/FINISHING REQUIRED WHERE SIDEWALKS ABUT CURB (AND/OR BUILDINGS)

Special sidewalk grades are required for sidewalks that abut curbs and cross driveways. The transverse slope across all sidewalks must be 2% or flatter, including through the driveway. Curb head shall be flush with the abutting sidewalk. To maintain the required cross slope through driveway openings will require special longitudinal grades of the sidewalk and special finishing of the abutting curb head. Sidewalk profiles through a driveway shall be depressed, and the curb head taper/transition (from full head height to driveway opening height) shall occur over an extended length, (which may vary/differ, one side of the driveway vs. the other side of the driveway).

The location(s) where the thicknesses differ at the sidewalk vs. driveway will vary – see plan details for driveway entrances. Note: Full depth expansion joint material is required at all changes in thickness and where sidewalks abut curb and gutter and buildings.

Special grading, forming, finishing, etc. shall be considered incidental to construction. Sidewalks and curb & gutter that do not comply with Standard Specifications, plan details and these requirements shall be removed and replaced by the Contractor to the complete satisfaction of the City Engineer.

40. CURB RAMP AND LANDING SLOPES – LAYOUT AND CONFIRMATION

As required via Section 15 of the Standard Specifications, curb ramps, landings and sidewalks shall be constructed to comply with accessibility requirements (ADA/ADAAG), in accordance with the plan details. The design of curb ramps/landings at street/sidewalk intersections is typically controlled by a critical curb ramp (edge) slope (i.e. the steepest ramp slope allowed but less than or equal to 8.33%). The City Engineer will provide information to the Contractor's forming/layout foreman indicating the location of the controlling ramp slope (edge).

Prior to final setting of forms for curb ramps/landings, the Contractor shall confirm/verify/measure actual slopes with the City Engineer, using a direct-reading accurate digital 4-foot hand level capable of displaying slopes in percentage units. The City Engineer must approve the layout is in conformance with the plans, details and specifications, prior to the Contractor's ordering of concrete.

41. SEAL EXPANSION JOINT

The Contractor shall seal the expansion joint filler material placed adjacent to and abutting a building (with a basement or crawl space below grade) and fill any void between the sidewalk or pavement, expansion joint/filler and/or building foundation wall, in accordance with the plans and this Special Condition.

Sealant shall be a non-staining, gray, non-bituminous, self-leveling joint sealer that will not track/deform in warm weather nor crack/shrink in cold weather, meeting ASTM C-920 requirements. Expansion Joint Sealant shall be Vulkem 45SSL as manufactured by Tremco.

Contractor shall completely remove expansion joint/filler material to at least 1/2-inch below the surface of the concrete sidewalk. Fill all voids with sealant, placing it in layers if necessary to fill deep voids. Sealer shall be flush with the surface of the concrete when completed.

Seal Expansion Joint will be measured per Lineal Foot measured along the sealed expansion joint.

Payment will be made at the contract unit price and shall be considered full compensation for all work described or implied herein, including but not limited to removing, trimming, filling, sealing, protecting, disposal of waste and clean-up, along with all mobilization, labor, tools, equipment and incidentals necessary to complete the work.

42. RESTORATION OF TURF SURFACES (FINISHED TERRACES)

Turf surfaces shall be restored in accordance with the plans, typical sections, the City's Standard Specifications and these Special Conditions. Topsoil processing, preparation and seed mixture shall comply with the following requirements:

Restore to a well groomed lawn condition using imported processed topsoil. Seed using City Seed Mix (2016) at 5 lbs. /1000 SF. Cultipack before and after seeding to develop a firm seed bed and insure good seed-soil contact. This work shall be paid for at the Contract Unit Price for Finished Terraces – City Seed Mix (2016), per square yard, based upon the plan quantities (without measurements).

43. FINISHED PLANTING AREAS {EXCLUDING 2ND STREET RECONSTRUCTION PROJECTS}

Finished Planting Areas, may include landscaped areas, topped with bark, mulch, woodchips, etc. which shall be restored to match the characteristics of the existing planting areas to remain, including type of materials, thicknesses, size/color/shape/etc. of the surface. The surface shall be raked/shaped, tamped and consolidated. Topsoil meeting the requirements of Section 16 of the Standard Specifications shall be underlying the surface layer, with native clay subsoils underneath the topsoil. Provide and install 8-mil plastic sheeting if a similar barrier is present in the undisturbed planting areas. All work and materials shall be done to the complete satisfaction of the property owner and City Engineer.

Finished Planting Areas shall be measured and paid for per Square Yard in accordance with said Section 16.

44. PLANTING SOIL {2ND STREET RECONSTRUCTION PROJECTS}

Furnish and place Planting Soil within Tree Pits, at Tree Grate areas and at other planting sites as shown on the plans.

Planting Soil shall comply with the following:

- ASTM D-5268 topsoil.
- Acceptable pH range of 5.0 to 7.5.
- Organic content of 8% minimum.
- Compost to topsoil ratio by volume 1:4.

Provide a detailed report of the soil analysis to the City Engineer one week prior to delivery of Planting Soil.

Process topsoil as required per Section 16.2.1 of the Standard Specifications.

Place the pre-mixed planting soil in layers of 6-inches loose and hand tamp lightly to consolidate and remove air pockets. Do not over compact.

Excavate as necessary per plan details. Excavation for Planting Soil shall be considered incidental to the Planting Soil. Where the underlying substrate below the proposed Planting Soil is rock aggregate (select crushed material or open graded base), separate this material from the Planting Soil with Geotextile Fabric, Type SAS, (measured and paid for per Square Yard).

At Tree Pits, Planting Soil will be covered with Hardwood Mulch as specified elsewhere (measured and paid for per Square Yard).

At Tree Grates, Planting Soil under the grate will be covered with Stone Mulch as specified elsewhere (measured and paid for per Square Yard).

Under Permeable Paver areas adjacent to Tree Grates, install Planting/Soil Root Cell Support Matrix and place Geotextile Fabric Type DF Schedule A over the Planting Soil (measured and paid for per Square Yard).

Planting Soil shall be measured per Cubic Yard, In-Place.

Payment will be made at the Contract Unit Price and shall be considered full compensation for all excavation, processing, testing, placing, tamping, disposal of waste and clean-up along with all materials, labor, tools, equipment and incidentals necessary to complete the work.

45. PLANTING SOIL/ROOT CELL SUPPORT MATRIX {WEST 2ND STREET RECONSTRUCTION PROJECT}

Where indicated on the plans and details, planting soil shall be placed underneath a permeable paver area surrounding grated tree pits. This planting soil is required for tree growth/maturity; however the planting soil cannot be compacted and shall therefore be supported by Planting Soil/Root Cell Support Matrix in accordance with this Special Condition.

Support Matrix materials shall be manufactured interlocking modules with positive lateral and vertical connections creating a stable matrix capable of transferring expected live and dead loads above the planting soil vertically downward to materials below said soil, made from non-metallic non-degrading materials. The matrix system shall provide at least 90% of the total volume for placement of planting soil, with unrestricted space for lateral root growth.

Planting Soil/Root Cell Support Matrix shall be Stratavault as manufactured by Citygreen USA. Note: The City Engineer will consider alternate materials from other manufacturers after award of the project based on potential cost savings to be achieved.

Install matrix material to line and grade (as necessary for proposed surfaces above this area), by blending Base Aggregate Open Graded materials into the underlying, existing Select Crushed Material.

Completely envelope (sides and bottom) and isolate planting soil (with Root Cell Support Matrix) from existing aggregates (with or without aggregate leveling courses) using Geotextile Fabric Type SAS.

Place Planting Soil within the matrix in layers such that soils remain loose but without voids (hand tamp lightly to consolidate and remove air pockets, etc.).

Separate the proposed Base Aggregate Open Graded leveling course above the Planting Soil/Root Cell Support Matrix using Geotextile Fabric Type DF Schedule A.

Planting Soil/Root Cell Support Matrix shall be measured and paid for per Cubic Foot, said measurement based upon the peripheral measurements less cut-out areas such as at tree grates, bollard bases, etc.

Payment will be made at the Contract Unit Price and shall be considered full compensation for delivery, assembly, cutting, installing, placing, furnishing, disposal of waste and clean-up along with all labor, tools, equipment and incidentals necessary to complete the work.

Note: The following materials under or over the Root Cell Support Matrix will be measured and paid for separately:

Base Aggregate Open Graded (Measured and paid for per Cubic Yard – In Place, based upon and limited to a 4-inch total thickness).

Geotextile Fabric Type DF-A (Measured and paid for per Square Yard).

Planting Soil (Measured and paid for per Cubic Yard – In Place).

Geotextile Fabric Type SAS (Measured and paid for per Square Yard).

46. TREE GRATES (WITH TREE GUARDS){ WEST 2ND STREET RECONSTRUCTION PROJECT }

Contractor shall install Tree Grates as shown on the plans and details for the West 2nd Street Reconstruction Project. Tree Grates shall be an assemblage of the grates, frame, support, tree guard and tree tie for each tree designated to receive a Tree Gate.

Tree Gate materials shall include:

Grate: Neenah #R8706-1A, 48-inch x 48-inch, unpainted, ADA compliant, with a single light opening section and cast iron light opening plate. Light opening plate shall be modified at the factory to include four ¾-inch diameter holes for anchor bolts and one 5-inch diameter hole for conduit(s), per plan details, for mounting proposed Power Pedestals.

Frame: Neenah #R8500, cast iron frame for the selected grate, for installation in/adjacent to a concrete surface.

Tree Guard: Neenah Type A, 5-foot height, 18-inch tree opening diameter, black powder-coat paint finish.

Tree Tie: Green Blue Urban – Tree Guard Tie.

Curing compound shall comply with ASTM C1315 Type I clear.

Sack rubbed finishing mortar shall be submitted to the City engineer for approval.

All other materials to be incorporated into this work shall conform to pertinent sections of the Standard Specifications and these Special Provisions.

Install Tree Grate Support, per plan details, after placement of the Planting Soil, after placement of the Open Graded Base under the permeable pavers and before placement of the base concrete under the permeable pavers.

Place and compact Open Graded Base under the concrete support area. The volume of this base shall be incidental to the tree grate.

Form inside and outside faces of the concrete Tree Grate Support. Neenah Foundry Co. recommends building the internal form (using trimmed 2" x 8" lumber) such that the outside dimension of this form is 45-3/4-inches x 45-3/4-inches. The elevation of the top of the form shall be as needed such that the tree grate surface will be at finished grade when resting in the frame (which is temporarily supported by the form). Steel reinforcement shall be placed, lapped, tied and supported per the Standard Specifications.

Assemble the cast iron frame (per Neenah's recommendations) and set/secure it on top of the previously set internal form.

Mask and set the grate within the frame and check for proper surface elevation. Adjust internal form and frame as necessary.

Immediately after pouring, consolidating and finishing concrete support, cover the exposed fresh concrete with plastic. Leave covered until all forms are removed.

Immediately following form removal rub all surfaces to provide a sack-rubbed finish, using mortar approved by the City engineer. Fill all holes, cavities, irregularities, honeycomb, etc. to provide a uniform appearance and texture, free of all blemishes.

Spray cure all exposed surfaces as soon as possible after sack-rub finishing.

Tree Grate (with Tree Guard), as an assemblage, shall be measured as a single unit, per Each.

Payment will be made at the Contract Unit Price and shall be considered full compensation for all shaping, forming, reinforcement, concrete, grate/light opening plate with holes, tree guard, tree tie, hardware/fasteners, miscellaneous materials, disposal of waste and clean-up, along with all labor, tools, equipment and incidentals necessary to complete the work.

47. PERMEABLE PAVERS OVER CONCRETE {2ND STREET RECONSTRUCTION PROJECTS}

Construct permeable paver areas as shown on the landscaping/streetscape plans for the East and West 2nd Street Reconstruction Projects. Pavers shall be placed over specially constructed concrete base.

Materials shall comply with the following:

Permeable Pavers (per ASTM C902) by Pine Hall Brick, Storm Pave, 2-1/4-inch thick.

Type 1 Paver – Infill; 4" x 8", in English Edge "Red"

Type 2 Paver – Soldier Course; 4" x 8", in English Edge "Ironspot"

Note: The City Engineer will consider alternate paver materials from other manufacturers after award of the project, based upon potential cost savings to be achieved.

Bedding/leveling course and joint filler aggregate shall be washed, fractured, open-graded stone per ASTM No. 89 meeting the following gradations and free of fines, organics, salts and contaminants, including materials likely to cause efflorescence. Soundness and wear requirements apply.

Sieve Size	Percent Passing (by Weight)
1/2-inch	100
3/8-inch	90 to 100
No. 4	20 to 55
No. 8	5 to 30
No. 16	0 to 10
No. 50	0 to 5

All other materials to be incorporated into this work (Open Graded Base, Geotextile Fabrics, concrete, etc.) shall conform to pertinent sections of the Standard Specifications and these Special Provisions.

Excavation, Base Concrete, Geotextile Fabric Type FF and #89 Aggregate shall be considered incidental to the Permeable Pavers item. Materials lying below the base concrete shall be measured and paid for separately as specified elsewhere.

Base Concrete shall be constructed upon Open Graded Base as shown on the details, and shall be formed (all sides) unless specifically approved by the City Engineer. Holes shall be drilled through the concrete (and blown clean) to accommodate drainage.

Installation shall be by a Contractor and crew with a minimum of five years’ experience installing interlocking unit pavers on projects of similar size or dollar cost.

Install Geotextile Fabric Type FF over concrete base surface and wrap up edges one inch. Spread levelling course evenly over the concrete and screed. Set pavers high enough to allow for settling that will occur during final compaction. The screeded levelling course shall not be disturbed. Place sufficient levelling course in order to stay ahead of the laid pavers. Do not use levelling course to fill depressions in the base surface. Pavers shall be free of foreign material before installation. Inspect pavers for color distribution and replace all chipped, damaged or discolored pavers. Lay the pavers in the patterns as shown on the drawings and make adjustments to allow for whole paver use as often as possible. Maintain straight pattern lines. Pavers shall be cut with a double blade paver splitter or masonry saw.

Sweep the paver surface clean of all debris before compacting, in order to avoid damage from point loads. Use low amplitude, high frequency plate compactor with compactive effort of 3000 lbs. to compact the pavers into the levelling course. Compact the pavers and sweep joint filler into the joints according to manufacturer’s recommendations. All work to within 3 feet of the laying face must be left fully compacted and joints filled at the completion of each day.

Permeable paver surfaces and their interface with abutting surfaces must be pedestrian friendly and ADA compliant.

Permeable Pavers Over Concrete shall be measured per Square Feet of surface area successfully completed.

Payment will be made at the Contract Unit Price and shall be considered full compensation for excavation, delivery, installing, drilling, cutting, placing, furnishing, compacting, disposal of waste and clean-up, including all materials such as base concrete, Geotextile Fabric Type FF, leveling course, joint filler, permeable pavers, etc., along with all labor, tools, equipment and incidentals necessary to complete the work.

Note: The following materials which underlie Permeable Pavers Over Concrete will be measured and paid for separately:

- Open Graded Base (measured and paid for per Cubic Yard – In Place)
- Geotextile Fabric type DF-A (measured and paid for per Square Yard)
- Planting Soil (measured and paid for per Cubic Yard – In Place)
- Planting Soil/Root Cell Support Matrix (measured and paid for per Cubic Feet)
- Geotextile Fabric type SAS (measured and paid for per Square Yard)

48. FURNISHING AND PLANTING PLANT MATERIALS {2ND STREET RECONSTRUCTION PROJECTS}

This Special Condition Article describes furnishing and planting of Plant Materials (trees, shrubs, hedges, ground cover plants, etc.) along with maintenance, surveillance and care throughout the Plant Establishment Guarantee Period.

Type and Quality of Plant Materials

All Plant material shall conform to *American Standards for Nursery Stock*. Plants shall be true to species and variety specified and nursery grown in accordance with good horticulture practices under climatic conditions similar to those in the locality of the project for at least 2 years. They shall have been freshly dug. Plants shall be so trained in development and appearance as to be unquestionably superior in form, compactness, and symmetry. They shall be sound, healthy, vigorous, well branched and densely foliated when in leaf, and free of disease and insects (eggs or larva). They shall have healthy, well-developed root systems and shall be free from physical damage or other conditions that would prevent thriving growth.

Trees with multiple leaders, unless specified, will be rejected. Trees with a damaged, cut, or crooked leader, abrasion of bark, sunscald, disfiguring knots, insect damage, mold, prematurely opened buds, or cuts of limbs over $\frac{3}{4}$ " (2 cm) diameter that are not completely callused will be rejected. Balled and burlapped plants shall be dug with solid balls of adequate size, the balls securely wrapped with burlap or canvas, and tightly bound with rope or twine. Containerized plants shall be well established in the container with a root system sufficiently developed to retain its shape and hold together when removed from the container. Plants shall not be pot bound, nor have kinked, circling, or bent roots.

Plants shall conform to the measurements specified, except that plants larger than those specified may be used if approved by the City Engineer. Use of larger plants shall not increase the contract price. If larger plants are approved, the root ball, root spread, or container shall be increased in proportion to the size of the plant.

Caliper measurements shall be taken on the trunk 6 inches (15cm) above the root flare for trees up to 4 inches (10 cm) in caliper, and 12 inches (30 cm) above the root flare for trees over 4 inches (10 cm) in caliper. Height and spread dimensions specified refer to the main body of the plant and not from branch tip to branch tip. Plants shall be measured when branches are in their normal position. If a range of size is given, no plant shall be less than the minimum size, and no less than 50 percent of the plants shall be as large as the maximum size specified. Plants that meet measurements but do not possess a normal balance between height and spread shall be rejected.

Substitutions of plant materials will not be permitted unless authorized in writing by the City Engineer. If proof is submitted, substantiated in writing, that a plant specified is not obtainable, consideration will be given to the nearest available size or similar variety, with a corresponding adjustment of the contract price.

All plants shall be labeled by plant name and size. Labels shall be attached securely to all plants, bundles, and containers of plant materials when delivered. Plant labels shall be durable and legible, with information given in weather resistant ink or embossed process lettering.

Certification

All plant materials, shipments, and deliveries shall comply with state and federal laws and regulations governing the inspection, shipping, selling, and handling of plant stock. A certificate of inspection, or a copy thereof, for injurious insects, plant diseases, and other plant pests shall accompany each shipment or delivery of plant material. The certificate shall bare the name and address of the source of the stock.

Delivery

Provide 2 days notice to the City Engineer prior to the delivery of plants to the jobsite.

Plants shall be inspected upon delivery and the City Engineer reserves the right to reject any plants that do not meet the standards or that have been damaged during shipment. Such approval shall not impair the right of inspection and rejection during the progress of the work. A Contractor's representative shall be present at all inspections. The City Engineer shall be the sole judge of acceptability of stock at any time during the course of this contract.

Digging and Handling Plant Materials

Plants to be balled and burlapped shall be dug with firm, natural balls of earth of diameter not less than that recommended in *American Standard for Nursery Stock*, and of sufficient depth to include fibrous and feeding roots. The root flare shall be within the top 2" of the soil ball. Balled and burlapped plants will not be accepted if the ball is dry, cracked, or broken before or during planting operation.

Plants must be protected from excessive vibrations. Plants shall not be thrown or bounced off a truck or loader to the ground.

Plants must be protected at all times from sun and drying winds. Those that cannot be planted immediately on delivery shall be kept in the shade, well covered with soil, wet wood chips, or other acceptable material, and kept well-watered.

No plants shall remain unplanted any longer than 3 days after delivery. Plants shall not be bound with wire or rope in such a manner as to damage the bark or break branches. Plants shall not be dragged, lifted, or pulled by the trunk or foliage parts in a manner that will loosen the roots in the ball.

Planting Operations

Plants shall be set with the top of the root flare at or up to 2" above finished grade. Plants must be centered in the hole and set plumb. Plants shall be set so that they will be at the same depth 1 year after planting.

For plants in plastic or metal containers, the container shall be removed before planting. For plants in biodegradable pots, the pot shall be slit vertically in at least 3 places prior to backfilling. If roots are crowded or coiled on the bottom, sides, or surface of the root ball, they shall be gently separated from the edges or surface.

All ropes, strings, wire baskets, burlap, and other wrappings shall be removed from the ball prior to setting the plant.

Planting holes shall be backfilled with Planting Soil. When holes are approximately two-thirds full, they shall be thoroughly watered to eliminate air pockets. After this initial watering, Planting Soil shall be installed to the top of the hole and watered. Puddled soil conditions shall be avoided. Planting areas shall be finish-grade to conform to drawings after full settlement has occurred.

Plants shall be thoroughly watered immediately after planting.

All twine, rope, transit guards or wrappings, secured around the trunk or branches shall be removed after planting is completed.

Staking, bracing and/or guying of trees, as necessary to stabilize trees as determined by the Contractor, shall be done in a manner that complies with industry standards, will not harm the tree and is not unsightly to the public. Providing, installing, maintaining and thereafter removing staking, bracing and/or guying shall be considered incidental to planting of the tree.

Pruning

Perform pruning according to ANSI A300 standard practices for tree care operations – tree, shrub and other woody plant maintenance. Prune so that the plant retains its natural form. Make all cuts immediately above the bark ridge and branch collar to leave the ridge and collar intact for healing. The Contractor shall not prune evergreen plants except to remove dead or broken branches or multiple leaders. Treat cut surfaces on oak trees as specified for cut surfaces and abrasions.

Cut off smoothly the bruised or broken parts of large or fleshy roots and branches dead, broken or damaged otherwise, before planting. Perform all other pruning near the end of the plant establishment period in mid-to-late August, but before the final inspection. Unless specified otherwise, or the City Engineer directs, prune deciduous trees by removing branches that compete with the dominant central leader and thin all deciduous plants as necessary to improve the branch structure of the plant.

Surveillance and Care

Properly care for all plants from the time of planting until the end of the Plant Establishment Guarantee Period.

Proper care of plants consists of watering, weeding, cultivating, pruning, spraying, tightening braces and guys, retying wrapping, re-mulching and other work necessary to keep the plants in a neat appearance and healthy growing condition. Between May 15 and October 15, in addition to watering required for planting, water completely at a 10-day to 14-day interval defined as a care cycle. Care cycle length can be extended beyond 14 days if weather and soil moisture conditions allow.

Water each plant hole sufficiently at each watering to keep the topsoil backfill material in a moist condition and to keep the plant in a healthy growing condition.

Remove and dispose of all evergreens and deciduous trees that die during the course of the plant establishment period as their dead condition becomes evident.

Keep all mulched areas free of all vegetation, except the specified plants, by hoeing, hand weeding or by using herbicides if approved by the City Engineer.

Apply pesticides as required to control insects and diseases and to keep the plants in a healthy condition.

Replace all plants that die or show evidence of dying during the plant establishment period at the earliest appropriate planting time after this condition becomes apparent.

Provide one person, called the care specialist, responsible for inspecting and performing the required care. Also provide other personnel, vehicles, equipment, tools and materials needed to accomplish the inspection and care. Have the care specialist do the following:

1. Perform care requirements to the satisfaction of the City Engineer a minimum of once every two weeks.
2. Notify the City Engineer at least two days before the beginning of each care cycle.
3. Submit a written report to the City Engineer after each care cycle. Ensure that the report documents the work performed during the care cycle; the number, type and location of each plant that was removed or marginal; and other information the City Engineer or the specialist deems appropriate.

Plant Establishment Guarantee Period and Replacement

All plants shall be guaranteed to be healthy and in flourishing condition through October 15 of the succeeding year after construction. The guarantee does not include vandalism, storm damage or animal damage.

The Contractor shall remove and replace, without cost, and as soon as weather conditions permit, and within a specified planting period, all plants not in a healthy and flourishing condition as determined by the City Engineer any time during the guarantee period. Replacements shall be subject to all requirements stated in this specification.

In the event that a replacement plant is not acceptable during or at the end of the said extended guarantee period, the City Engineer may elect subsequent replacement or credit for that item.

The Contractor shall be responsible for all maintenance of the plantings during the guarantee period.

Final Inspection and Acceptance

At the end of the guarantee period and upon written request of the Contractor, the City Engineer shall inspect all guaranteed work for final acceptance. The request shall be received at least 5 working days before the anticipated date for final inspection. Upon completion and re-inspection of all repairs or renewals necessary in the judgment of the City Engineer at that time, the City Engineer shall certify that the project has received final acceptance.

Replacement

On or after September 1, 2016 but before leaves have fallen, an initial inspection will be made by the City Engineer and Contractor of all plants. Any plants which, in the opinion of the City Engineer, are dead or not in good growing condition shall be replaced at the Contractor's expense. Replacements will be made in the fall of 2016.

Measurement and Payment

Plant Materials will be measured and paid for per Each per type of plant, species, size, root, etc.

Payment will be made at the Contract Unit Prices and shall constitute full compensation for all work and materials as described or implied herein or on the plans, including but not limited to furnishing, providing, transporting, delivery, certification, digging, handling, storing, protecting, planting, replacing, maintaining, pruning, guaranteeing, surveillance and care, along with disposal of waste, clean-up, labor, tools, equipment and incidentals necessary to complete the work.

Damages for failure to perform maintenance, surveillance and care as specified will be assessed in an amount necessary to cover the cost of performing the work by other forces plus administrative costs.

49. HARDWOOD MULCH {2ND STREET RECONSTRUCTION PROJECTS}

Planting sites which are to covered with Hardwood Mulch per plan details shall receive 3-inches (minimum thickness) over the entire planting area.

Hardwood Mulch shall be clean, chipped hardwood free of material injurious to plant growth. Wood chips shall be 1/8-inch nominal thickness with at least 50% having an area of not less than 1 square inch and no piece having an area of more than 6 square inches.

Pull mulch back 3 to 6 inches from tree trunks.

Ensure areas receiving Hardwood Mulch are free of living weeds and grasses prior to placement of mulch.

Hardwood Mulch shall be measured and paid for per Square Yard, without deduction for void areas at tree trunks.

Payment shall be made at the Contract Unit Price and shall constitute full compensation for all work and materials as described or implied herein.

50. STONE MULCH {2ND STREET RECONSTRUCTION PROJECTS}

Planting sites under (tree grates) which are to be covered with Stone Mulch per plan details shall receive 3-inches (minimum thickness) and Weed Barrier Fabric over the entire planting area.

Stone Mulch shall be clean, whole, rounded stones, 3/8" nominal size. Weed Barrier Fabric shall comply with WisDOT requirements (Section 632.2.14 of WisDOT's 2016 Standard Specifications).

Pull mulch back 3 to 6 inches from tree trunks.

Ensure areas receiving Stone Mulch are free of living weeds and grasses prior to placement of mulch.

Stone Mulch shall be measured and paid for per Square Yard, without deduction for void areas at tree trunks.

Payment shall be made at the contract Unit Price and shall constitute full compensation for all work and materials (including Weed Barrier Fabric) as described or implied herein.

51. CORNER EMBLEM {2ND STREET RECONSTRUCTION PROJECTS}

As shown on the plans and details, Corner Emblems shall be incorporated into the streetscape of the 2nd Street Reconstruction Projects.

Corner emblems shall be provided and installed by others. Joint fill and leveling course under the emblem shall also be the responsibility of others.

Contractor shall confirm the dimensions of the Corner Emblem with the City Engineer and emblem manufacturer prior to installing base concrete under the slab.

Corner Emblems shall be installed (by others) after placement of all surfaces/features adjacent to and abutting Corner Emblems (sidewalk, curb ramp, colored concrete sidewalk, tree pit planter curb, etc.)

The base concrete below each Corner Emblem shall be formed, placed and cured (per sidewalk specifications), and will be measured and paid for as Concrete Sidewalk, 5-Inch, per square foot.

The Open Graded Base to be placed below the base concrete will be measured and paid for (as Open Graded Base) per cubic yard in-place.

52. RE-SEAL EXISTING COLORED CONCRETE SURFACE {COLORED CONCRETE MAINTENANCE AND REPAIRS PROJECTS}

Existing colored concrete surfaces to be re-sealed including crosswalks, medians and islands on Central Avenue; crosswalks on Chestnut Avenue; and crosswalks on side streets, shall be cleaned and re-sealed. Clean, treat and re-seal existing concrete pavement joints (if required per plans or direction of the City Engineer) concurrent with Re-seal Existing Colored Concrete Surface.

Colored concrete surfaces shall be re-sealed with TK Tri-Siloxane 290 Final Seal, as produced by TK Products, Inc.

Clean the existing colored concrete surface by pressure washing (as a minimum) at pressures sufficient for thorough cleaning to remove all dirt and debris such as tire marks, joint seal, oil/grease, etc. Allow sufficient time for all surfaces to completely dry, **24 hours minimum**, prior to surface sealing.

Apply sealer by spraying, immediately followed by back rolling using a ¼" – 3/8" nap roller (non-foaming, non-bubbling), and in accordance with manufacturer recommendations. Application rate shall be approximately 125 square feet per gallon, maximum. Although only one coat is anticipated, actual coverage rate is expected to vary.

Caution: Siloxane is a solvent and will soften or remove concrete curing compound, pavement markings, hot-poured (tar) sealants and some asphaltic surfaces.

During all cleaning and re-sealing operations, contain debris and protect vehicles, pedestrians, buildings, poles, etc. Mask adjacent surfaces to prevent damage to existing pavement markings, joint seal and asphalt surfaces to remain.

Apply surface sealer after cleaning and preparing joints (if required) but before re-sealing of said joints.

Re-Seal Existing Colored Concrete Surface shall be measured per Square Yard, without deduction of any partial depth repair area, successfully completed and accepted.

Payment will be made at the Contract Unit Price which shall be considered full compensation for all pressure washing, sweeping, cleaning, protecting, masking, sealing, disposal of waste and clean-up, along with all mobilization, tools, equipment, materials and incidentals necessary to complete the work.

53. CLEAN, TREAT AND RE-SEAL EXISTING CONCRETE PAVEMENT JOINTS

Existing concrete pavement joints to be re-sealed shall be cleaned, treated (deep penetrating silane water repellent) and re-sealed. 'Treating' existing concrete pavement joints shall be in accordance with Special Conditions Article "Treat and Seal New Concrete Pavement Joints" as included in these Special Provisions. 'Sealing' existing concrete pavement joints shall be in accordance with Section 11-C of the Standard Specifications.

Cleaning existing joints shall include removal of old sealant and foreign materials by brushing and/or sawing followed by pressure washing as described per the 'Treating' Special Condition. Existing sawed joints shall be widened using a saw blade which is 1/16-inch wider than the existing joint. Existing joints which were not originally sawed (i.e. tooled/edged joints) shall be sawed using a 1/8-inch wide blade, to a depth of T/3.

During all cleaning, treating and re-sealing operations, contain debris and protect vehicles, pedestrians, buildings, poles, etc. Mask adjacent surfaces to prevent damage to existing pavement markings, joint seal and asphalt surfaces to remain.

Clean, Treat and Re-Seal Existing Concrete Pavement Joints shall be measured per Lineal Feet along the joint in place, successfully completed and accepted.

Payment will be made at the contract unit price which shall be considered full compensation for all sawing, pressure washing, sweeping, cleaning, protecting, masking, treating, sealing, disposal of waste and clean-up, along with all mobilization, tools, equipment, materials and incidentals necessary to complete the work.

54. EXISTING COLORED CONCRETE PARTIAL DEPTH REPAIR {COLORED CONCRETE MAINTENANCE AND REPAIRS PROJECTS}

Existing colored concrete crosswalk pavement (9-inch thickness) on the Central Avenue project, with deteriorated concrete (typically at joints) shall be rehabilitated via Colored Concrete Partial Depth

Repair work, including removal of deteriorated concrete, sawing a vertical edge at the repair limit and placement of repair material, in accordance with this Special Condition and the repair material manufacturer's recommendations.

The repair material for Partial Depth Repair of Existing Colored Concrete Crosswalk Pavement shall be TechCrete as manufactured by Crafcro Inc. with appropriate color agent to match the remaining existing colored concrete pavement. TechCrete is a hot-applied repair mastic requiring specific equipment for proper application. Use this material with bulking aggregate (CrafCo Structural Aggregate) for repair depths greater than 2-inches but not exceeding 20% by volume.

Primer shall be TK-Tri-Silane 590-1 MS (TK 590-IMS) as produced by TK Products, Inc. The manufacturer of the repair material shall also approve the use of this primer and the application rate.

Colored surface aggregate shall match the color of existing colored concrete. Gradation of the surfacing aggregate shall be submitted for approval (anticipated to be coarse, clean sand). Colored surface aggregate shall provide a slip resistant surface for pedestrians (per ADA requirements), withstand traffic loadings/wear and shall be approved by the repair material manufacturer.

Limits

- Colored Concrete Pavement deterioration at joints, which are 1-inch or less in width shall not be rehabilitated, but will be cleaned, treated and re-sealed as specified elsewhere.
- The finished prepared repair area shall not be less than 4-inches in width. If the finished prepared repair area width will exceed 12-inches at any doweled transverse joint then Partial Depth Repairs shall not be allowed at that location.
- The finished prepared repair depth shall not be less than 1-1/2-inches. If the finished prepared repair area depth will exceed 4-1/2-inches (or exposes more than 120° of any existing dowel bar) then Partial Depth Repairs shall not be allowed at that location.
- Repair areas which exceed the width and/or depth limits as described above shall be rehabilitated via removal and replacement (as specified elsewhere within the Special Provisions).

Contractor shall provide a detailed Plan of Operations report and schedule describing the order and duration of proposed incremental work steps, staging of traffic controls, etc.

A representative from the repair material manufacturer shall be a member of the Contractor's Partial Depth Repair team providing technical assistance prior to commencement of the work and shall be on site to observe all phases of the work until such time that said representative and the City Engineer are satisfied with the work processes.

Prior to beginning any rehabilitation operations, establish traffic control for rehabilitation survey(s) and marking of locations/limits. Contractor and City Engineer will survey rehabilitation needs at all crosswalks immediately following set up of temporary traffic controls. This survey is intended to reveal suitable Partial Depth Repair locations – if the width of the prepared repair area exceeds maximum width limits then partial Depth Repair is not viable (proceed to Remove and Replace methods). Use non-invasive methods such as a hammer or chain to sound areas surrounding potential repair areas.

Clean existing joints abutting a Partial Depth Repair area and remove existing joint sealant/foreign materials by brushing and/or sawing. Existing joints shall be widened 1/16-inch into the existing gray concrete. Existing joints which were not originally sawed shall be sawed prior to Partial Depth Repairs, using a 1/8-inch wide blade, to a depth of T/3.

Remove deteriorated colored concrete (and any temporary filler/patch material such as cold mix asphalt) without damaging existing concrete pavement (colored or gray) to remain, including existing dowel bars. Clean/remove loose material and debris from the bottom and vertical faces of repair areas.

Use air chippers or breakers for chipping existing concrete that have a total weight not exceeding 30 pounds and are equipped with a flat, chisel-type point with a cutting edge not less than 0.75-inch or greater than 3-inches wide.

Saw cut a 1-1/2-inch vertical edge at /adjacent to the prepared removal limits. Saw cuts shall be straight, true and parallel to the transverse or longitudinal joint. Where variable repair widths occur transitional cuts shall be made at 45°. The minimum length of a parallel saw cut shall be 4-feet. Combine repair areas such that gaps in between repairs are at least 4-feet. No more than 2 parallel saw cuts will be allowed within one edge of a concrete pavement panel. No over- sawing of said intersecting cuts will be allowed. Small tools, saws and/or grinders will likely be needed to satisfactorily complete this work.

After removal of deteriorated colored concrete, and immediately prior to placing repair materials, sandblast exposed surfaces, immediately followed by air blasting (oil/moisture free).

Mask all surrounding pavements, gray and colored to prevent repair materials from being carried over repair limits.

Coat exposed surface areas of dowel bars with grease to prevent bonding between the bar and repair material.

Apply primer on the entire repair area (bottom and vertical faces) per manufacturer's recommendations. Allow sufficient time for primer to cure (weather dependent).

Apply the repair material following the manufacturer's recommendations. Application of a bonding agent prior to placement is required. Place repair material in layers (as required), using Crafcoc's Hot Mastic Applicator portable melter equipment.

Strike off and finish the surface such that the completed repair will be flush with the adjacent concrete (colored and/or gray) surface, true to grade and cross-section and free from porous areas, humps and depressions.

Apply surface aggregate in accordance with the manufacturer's recommendations.

Contractor shall protect unset/unhardened repair areas from errant pedestrian traffic by providing adequate numbers of 'watchmen', in addition to other barriers, to prevent harm to pedestrians and damage to repair areas.

Repair of existing gray concrete edges (pre-existing) adjacent to existing colored concrete crosswalks shall be required as work under this Special Condition, however these repairs do not require a saw cut at repair limits. Repair material to be used at these limited locations (as directed by the City Engineer) shall be VersaSpeed as manufactured by the Euclid Chemical Co. Follow the manufacturer's recommendations. Measurement and payment shall be in accordance with this Special Condition (paid for under "Colored Concrete Partial Depth Repair, measured per Square Foot).

The Contractor shall guarantee all work and materials for Partial Depth Repairs for the full warranty period as required by the contract (1-year after completion). Failures such as but not limited to spalling, peeling, loss of bond (to existing concrete), edge shrinkage or cracking, which is apparent by the end of the warranty period shall be remedied by the Contractor to the satisfaction of the City Engineer.

Colored Concrete Partial Depth Repair shall be measured and paid for per Square Foot of repair area surface measured from the saw cut at the repair limits to the edge of the existing remaining adjacent concrete pavement, acceptably completed.

Payment will be made at the Contract Unit Price and shall be and shall be considered full compensation for all work and materials as described or implied herein, including but not limited to

surveying, technical assistance, preparing, chipping, chiseling, removing, sawing, sand-blasting, air-blasting, protecting, masking, heating, coloring, placing and finishing; for delivering, storing, handling and placing materials such as the repair material and surface aggregate; for disposal of waste and clean-up; along with all labor, tools, equipment and incidentals necessary to complete the work.

55. REMOVE AND REPLACE EXISTING COLORED CONCRETE CROSSWALK {COLORED CONCRETE MAINTENANCE AND REPAIRS PROJECTS}

Existing colored concrete crosswalks on the Central Avenue project shall be removed and replaced as designated per the plans or the discretion of the City Engineer.

Existing colored concrete to be removed shall be done so with extreme care not to damage the abutting existing gray concrete to remain. Double sawing (approximately 6" apart), completely through the entire thickness is required around the periphery, however only the outer cut will be measured for payment.

Drilled dowel Bars must be installed using a gang-drill, properly spaced, positioned and aligned. Bars must be new, clean and undamaged. Plastic retention caps are required (to hold epoxy in place). Hand apply grease to the free end immediately prior to pouring.

Removal and replacement work pay items shall be in accordance with Section 17 of the Standard Specifications:

- Saw Existing Concrete Pavement Full Depth (measured and paid for per Lineal Foot)
- Remove Existing Concrete Pavement (measured and paid for per Square Yard)
- Drilled Dowel Bars (measured and paid for per Each)
- Drilled Tie Bars (measured and paid for per Each)

Replacement of the Colored Concrete shall comply with the Special Provisions, measured and paid for per Square Yard as "Colored Concrete Crosswalk Pavement, 9-Inch".

56. EROSION CONTROLS

To comply with storm water permits and/or protect waters or wetlands, the Contractor is required to install erosion controls (per the City's Standard specifications, Section 18) prior to the start of construction/excavation and as soon as possible at newly constructed areas. Install Inlet Protection, Type 'A', concurrent with (pavement) removals, as shown on the plans.

Plan details and specifications not only require timely installation, but also proper installation of approved materials. The Contractor is also responsible for maintenance of all erosion controls throughout the duration of the project.

Contractor shall install Inlet protection on all existing and proposed drainage structures within and adjacent to construction limits. Where existing structures are to remain (casting to remain, adjustment required) Inlet Protection shall be measured and paid for, per Each, as a single unit, for the existing structure and the adjusted structure (not paid separately).

The City Engineer reserves the right to deduct 50% or more of the contract unit prices for erosion controls due to the Contractor's use of deficient materials, improper installation, untimely installation and/or lack of maintenance of any or all erosion controls. The City Engineer also reserves the right to remedy (all of the above) utilizing City forces or others, with the cost of said remedy(s) either billed to the Contractor or deducted from final payment.

57. TEMPORARY WATER {EAST 2ND STREET RECONSTRUCTION PROJECT}

Contractor shall provide a temporary water system as necessary to coincide with the Contractor's construction schedule.

All temporary water service connections shall be made at the curb stop or fire service shut off valve. This will require digging each service.

Payment for the Temporary Water system shall be Lump Sum and will be paid upon completion of all residences being connected to the new water main.

58. VERTICAL OFFSETS OF WATER MAIN {EAST 2ND STREET RECONSTRUCTION PROJECT}

A vertical offset may be necessary in multiple locations as shown on the plan set to maintain separation distances between the water main and the sanitary or storm sewer. A vertical offset shall consist of all bends and piping necessary to achieve the separation. A vertical offset shall be paid per each offset location.

59. CONTAMINATED SOIL WATER MAIN GASKETS {EAST 2ND STREET RECONSTRUCTION PROJECT}

Special gasket materials are required for contaminated soil water mains. Special gaskets shall be impermeable to contaminants expected to be encountered. Gaskets shall be Fluorocarbon (FKM). Special gaskets must be marked or labeled to clearly indicate Fluorocarbon material. Payment for special gaskets shall be at the unit price per Each size installed.

60. EXISTING PVC SANITARY SEWERS AND GROUNDWATER

The Contractor is hereby informed that existing PVC sanitary sewers abutting/adjacent to proposed sanitary sewer projects were typically bedded/covered with clean stone and usually release groundwater when exposed. Existing PVC sanitary sewer trenches upstream of proposed projects therefore have the potential to convey sizeable volumes of trench water. The Contractor shall plan for handling of said water, prior to beginning excavation. This trench water can be pumped to the storm sewer if said water remains clean (free of sediment, dissolved solids, contamination, etc.).

61. CONNECT TO EXISTING SANITARY SEWER MAINS {EAST 2ND STREET RECONSTRUCTION PROJECT}

Connect new PVC sanitary sewer mains to existing sanitary sewers of varying sizes and materials as described below and in conformance with the plans, Standard Specifications and these Special Conditions.

- a. Connect to existing same sized PVC sanitary sewer mains using a gasketed PVC repair coupling {#1, 8"}.

All connections of a new PVC sanitary sewer to an existing sewer shall be water tight. Flowlines shall not offset horizontally or vertically at the connection (excluding the offset through the reducing fitting).

Remove sharp edges on the inside of the upstream pipe and bevel (1/4") the inside edges of the downstream pipe.

Connections will be verified by internal inspection, and/or televising by the City. Coordinate with the City and Wastewater Utility, and provide reasonable access and assistance to accomplish inspection. Any downtime or delay shall be considered incidental to the work. Leaking or offset connections shall be remedied by the Contractor (incidental). Leaks may be repaired by pressure grouting within the main.

Connect to Existing Sanitary Sewer will be measured as a unit per Each per size and material of existing sewer pipe, in which a unit includes all of the work per location (i.e. one time), regardless of the number of (temporary) connections made.

Payment for measured quantities will be made at the contract unit price which shall be considered full compensation for all work described herein and on plan details including but not limited to excavation, removal, cleaning, preparation, installation and disposal of waste; and for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work.

62. LIGHT POLE/BOLLARD BASES, ELECTRICAL CONDUIT, PULL BOXES AND WIRING {2ND STREET RECONSTRUCTION PROJECTS}

As shown on the (Electrical) plans, the Contractor is required to provide and install reinforced concrete bases for light poles and bollards, pull boxes, conduits and wiring for a decorative street lighting system throughout this project. Installation of street lighting poles, fixtures, bollards, etc. is the Contractor's responsibility; however the City has purchased these materials outside of this contract (as specified elsewhere within these Special Conditions).

The City's electrician (i.e. 'others') will disconnect the existing traffic signal wiring and remove wire prior to or concurrent with work by the Contractor.

Conduits shall be installed at specific locations/offsets as shown on the plans at specified offsets/depths to avoid conflicts with other facilities. The City Engineer will provide stakes for conduit runs as needed. Conduits for street lighting on new/completely reconstructed streets shall be installed at least 24-inches below finished ground, 18-inches for sidewalk/terrace areas of 'retrofit' projects, both with a red caution tape installed 12-inches above the conduit. The electrician is hereby expected to coordinate and work closely with the grading contractor/foreman and City Engineer to assure proper installation of conduits. As shown on the plans conduits shall be 'bent' to achieve alignment changes however a union/coupling shall not be located within a 'bent' segment (use full length/20-foot pieces for 'bent' conduits, 90° alignment change to have approximately 15-foot radius of curvature). Conduits shall be protected via installation of bedding (2-inches below), side wall (4-inches clear, each side) and cover (6" above) material similar to the Base Aggregate.

Materials, construction methods and installation shall comply with Section 22 of the (City of Marshfield) Standard Specifications.

Electrical wire materials shall comply with Section 655 of WisDOT's Standard specifications, including:

- (655.2.6) Electrical Wire for Lighting

Concrete Bases, shall be installed per plan details. Bases shall be measured per type, per Each installed. Contractor shall confirm the anchor bolt pattern for the intended use for bases (light pole, bollard, etc.). Anchor bolts for light pole and bollard bases will be provided by the City.

Nonmetallic Conduit, including street lighting, bollards, receptacles, etc. shall be Schedule 40 PVC, or Schedule 80 PVC for retrofit projects installed per plan details. Conduit for bored runs shall be ETL listed HDPE, Sch 40, UL 651 A & B, and continuous from pull box/base to pull box/base. Do not directly connect HDPE and PVC conduits. A nylon pull string shall be placed inside each entire run of conduit from existing/proposed pull box to existing/proposed pull box. Nonmetallic Conduit shall be measured per Lineal Foot per size from/to the center of pull boxes or bases except at loop detectors

(which shall be measured as a complete unit, per each, per size of loop). Nonmetallic conduit installed via horizontal directional drilling/boring will be measured and paid for as Conduit – Bored, per lineal foot, per number of conduits, per size(s).

Pull Box 12" x 24", Pull Box 18" x 24" and Pull Box 24" x 36" shall utilize **SICPP pipe** (for non-pavement areas) and shall include equipment grounding provisions. Drain sumps are not required. Pull boxes shall be measured per Each per size installed.

Wire, per type of use, shall be installed and measured per the pertinent subsections of Section 655 of the WisDOT Standard Specifications. Payment shall be made per type of wire/use, per size/AWG, per Lineal Foot, in accordance with the Unit Price Schedule and said payment shall be considered full compensation for all work including but not limited to pulling, connecting, splicing, testing, etc., and all materials such as wire, wire nuts, connections, lugs, fuses, fuse holders, splices, tape, sealant, etc. along with all mobilization, labor, tools and equipment necessary to complete the work.

63. INSTALL STREET LIGHT/POLES {EAST 2ND STREET RECONSTRUCTION PROJECT}

This project includes a decorative street lighting system along Maple Avenue and all side streets. The Contractor is responsible for installation of street lighting components which will be provided by the City (new materials purchased prior to bidding this project). The decorative street lighting system materials were manufactured by Holophane, model name 'Sitelink', with black power coat finish. Components to be provided by the Owner (and assembled/installed by the Contractor) include:

- Poles (25 Each): Aluminum shaft posts, 22-feet in height, with a lower decorative base accessed via hand hole. Poles will include a festoon receptacle. (#SL5KW202200DIPX-SPCL RFD 131121 w/FGIUS-SBKH)
- Cross Arms (25 Each): (#OUC 45/1 CA BKH BHLF/200 SCA BKH R)
- Fitters (25 Each): (#BHLF/200 – SCA/BK)
- Fixtures (25 Each): (#ESL 150 4K AS B4DM w/ROAM Standard Node)
- Anchor Bolt Sets (25 Each): ¾-inch x 18-inch, (#AB-31-4)

Poles and materials will be stored at the City Garage (407 West 2nd Street). The Contractor shall load and transport poles/materials from the City Garage to the jobsite.

Contact the City Engineer (715.486.2034) at least two weeks prior to the pick-up date. Contractor shall inspect the materials with the City prior to transfer of the materials, and shall 'sign-off' on transfer of these materials. The Contractor shall be responsible for any damage to or loss of materials, as determined by the City, after 'sign-off' and possession of said materials by the Contractor.

Installation shall comply with Section 657 of WisDOT's Standard Specifications, plan/detail drawings, the manufacturer's recommendations and these Special Conditions.

Install Street Light/Poles shall be measured per Each street light pole successfully assembled and installed, complete.

Payment for Install Street Light/Poles shall be considered full compensation for all loading, hauling, storing, protecting, assembly, installation, miscellaneous materials, disposal of waste and clean-up, along with all mobilization, labor, tools, equipment and incidentals necessary to complete the work.

64. INSTALL LIGHTED BOLLARD {2ND STREET RECONSTRUCTION PROJECTS}

Decorative lighted bollards with festoon receptacles will be installed along 2nd Street as shown on the plans. Bollards and components will be purchased by the City and made available to the Contractor for assembly and installation.

Lighted Bollards will be as manufactured by Holophane, Columbia series, cast iron/black, clear lens, with weatherproof duplex receptacles. These bollards will be ordered with Standard Edison base sockets for a 100 watt light source, however, the actual light source to be used will be LED lamps. The Contractor shall install a fuse holder in the base and rewire the bollard accordingly.

LED lamps shall be 24 W, 120-277 VAC, 5700K CCT, standard Edison base mounting (E26) as manufactured by Light Efficient Design, SKU #LED-8019E57. (To be provided and installed by Contractor)

Bollards and materials will be stored at the City Garage (407 West 2nd Street). The Contractor shall load and transport bollards/materials from the City Garage to the jobsite.

Contact the City Engineer (715.486.2034) at least two weeks prior to the pick-up date. Contractor shall inspect the materials with the City prior to transfer of the materials, and shall 'sign-off' on transfer of these materials. The Contractor shall be responsible for any damage to or loss of materials, as determined by the City, after 'sign-off' and possession of said materials by the Contractor.

Installation shall comply with plan/detail drawings, the manufacturer's recommendations and these Special Conditions.

Install Lighted Bollards shall be measured per Each bollard successfully assembled and installed, complete.

Payment for Install Lighted Bollard shall be considered full compensation for all loading, hauling, storing, protecting, assembly, installation, for providing wire/fuse holders/bulbs and other miscellaneous materials, disposal of waste and clean-up, along with all mobilization, labor, tools, equipment and incidentals necessary to complete the work.

65. POWER PEDESTALS {2ND STREET RECONSTRUCTION PROJECTS}

Power Pedestals shall be provided and installed by the Contractor in accordance with the plans and these Special Provisions. Streetscape features (tree grate and tree pit planters) will be provided with electrical power via installation of Power Pedestals.

Power Pedestal materials and components shall be as follows:

- Pedestal shall be approximately 4-inch square, 12-inch height, composite tube with an integral base and removable top/cap, suitable for use in wet/outdoor locations, as manufactured by Cast Perfect Products, Inc. of Alberta Canada. Color shall be black.
- Receptacles shall be one-gang (two outlets) and rated for 20 amp service.
- Receptacle cover shall be 'while-in-use' style, suitable for use in wet/outdoor locations (NEMA 3R), metallic/die-cast aluminum, with a lockable tab, as manufactured by Hubble TayMac (MX3200) or approval equal. Color shall be black.
- Wire, connectors and all other components shall comply with Section 22 of the Standard Specifications.

Power Pedestals shall be mounted to tree pit curbs or tree grates as shown on the plans and details. Receptacles shall be oriented to face the tree closest to the Power Pedestal.

Curb mounting will require placing conduit and additional reinforcement steel within the tree pit curb forms prior to pouring, and drilling holes for concrete lag bolts at least 7 days after pouring.

Tree Grate mounting shall utilize holes provided by the tree grate manufacturer, utilizing the light hole and drilled plate. Conduits shall be secured to the underside of the tree grate.

Wire pigtails shall be 12 gauge, minimum.

Power Pedestals shall be measured per Each unit successfully assembled and installed, complete, regardless of the installed location (curb or grate).

Payment for Power Pedestals will be made at the contract unit price which shall be considered full compensation for all work and materials described herein and on plan details, including additional rebar, mounting hardware, assembly, installation, shipping/delivery, disposal of waste and clean-up, along with all mobilization, tools, equipment, testing and incidentals necessary to complete the work.

66. TRAFFIC CONTROL

All work zone traffic control signing for construction of each project stage shall be the Contractor's responsibility and shall be in accordance with Section 24 of the Standard Specifications and project plans.

Project locations to be closed for construction/reconstruction, as indicted in these Special Provisions (Article 1 – Project Scope) shall be signed as 'Road Closed', with advance warning signs required for all mainline approaches. If said mainline closure effectively closes a side road (including alleys, commercial entrances, etc.) then each said side road access shall also be signed as 'Road Closed' with advance warning signs.

Advance warning signs shall include a post-mounted 'Road Work Ahead' sign and a 'Road Closed to Thru Traffic' sign mounted on a Type III barricade.

Projects which are required to be open to traffic at the end of each working day shall be signed as described above; however, the 'Road Closed' sign at the construction limits shall be removed or covered when said road is open. Contractor shall place additional traffic control/warning signs as appropriate.

Projects which are required to be open to traffic at all times (live traffic) shall be appropriately signed in accordance with plan details and the MUTCD (Part 6/Work Zones), such as but not limited to lane closures, shoulder/parking lane work, etc.

Traffic control devices shall be used to mark inaccessible sidewalk locations, including advance warnings.

Special additional requirements per project include:

A. Oak Avenue Sidewalk Reconstruction (Depot Street to Cleveland Street)

On Oak Avenue, each block shall include four "Road Closed, Local Traffic Only" signs on Type III barricades (one sign/barricade at each side of Oak Avenue at each end of the block). Advance warning signs (roadway) are not required.

On side streets, use advance warning signs with lane closures if appropriate, only when construction work impacts intersections, including curb ramps and landings.

B. Alley Reconstruction (Chestnut/Central/6th/5th)

The adjacent and abutting municipal and private parking areas shall be delineated with "Road Closed" signs on Type III barricades (one per lot/area) with drums spaced 10-feet apart (maximum).

C. 1st Street & Cedar Avenue Intersection Reconstruction

Advance warning and additional "Road Closed Local Traffic Only" signs/barricades required at 2nd Street and Cedar Avenue, and 1st Street and Cherry Avenue.

D. West 2nd Street Reconstruction (Chestnut avenue to Central Avenue)

Advanced warning signage is required, on Central Avenue, Chestnut Avenue, 2nd Street west of Chestnut Avenue and the alley north of 2nd Street. No Left Turn and No Right Turn signs on Type II barricades are required on Central Avenue. The existing "Enter Only" and "Do Not Exit" signs at the Burlington Parking Lot entrance (on Chestnut Avenue, south of 2nd Street) shall be covered for the duration of this project.

E. East 2nd Street Reconstruction (Central Avenue to Maple Avenue)

Advanced warning signage is required, on Central Avenue, Maple Avenue, 2nd Street east of Maple Avenue and the alley south of 2nd Street. "No Left Turn" and "No Right Turn" signs on Type II barricades are required on Central Avenue.

F. Colored Concrete Maintenance and Repairs, Central Avenue (17th Street to 2nd Street) and Chestnut Avenue (7th Street to 1st Street)

(1) General

Central Avenue, Chestnut Avenue and all side streets shall remain open for this project. Traffic Controls shall be in accordance with the plan details, MUTCD Standards and these Special Provisions.

Advance Warning Signs are required for mainline approaches and for side road approaches for signalized (at Central Avenue) side streets. Each 'Advance Warning Sign Package' shall include a fix message sign.

Temporary Stop Signs shall be provided where traffic controls shift traffic and/or obstruct existing stop signs.

Crosswalk Closed Signs (on Type II barricades) shall be in place during all times when work is occurring and/or materials (fresh concrete, partial depth repair, joint seal, surface seal, etc.) are soft or unstable.

Fixed Message Signs reading "Caution – Crosswalk Work, Watch for Pedestrians" shall be provided with advance warnings, on mainline segments at signalized intersections (14th, 7th, 4th and 2nd) and on side road approaches for said intersections.

(2) Central Avenue (17th Street to 2nd Street)

Utilize lane closures on Central Avenue and all side streets. Crosswalk work on side streets shall be completed concurrent with closure of the Northbound and/or Southbound outside lane(s). Work on Central Avenue medians and islands shall be completed concurrent with closure of the Northbound and/or Southbound inside lane(s). Maintain one full width lane (12-foot wide) for each direction of travel.

(3) Chestnut Avenue (7th Street to 1st Street)

Utilize lane closures on Chestnut Avenue and all side streets, reducing the traveled way to a single lane to be shared by both directions of travel, staged in accordance with plan details (concurrent work on Chestnut Avenue vs side streets will vary per existing traffic control).

Additional traffic control measures may be necessary to adequately protect the public and/or the work during select phases of construction.

Traffic controls shall be in place prior to the commencement of removals, including removals by others (poles, wire, etc.), and shall remain in place until final completion, including installations by others (asphalt pavement, etc.).

67. PAVEMENT MARKING CURB HEAD, YELLOW, EPOXY {SPECIAL LOCATION}

As part of this Contract, the Contractor (Subcontractor) shall paint the curb head (raised and depressed) to delineate the existing driveway at 112 West 4th Street.

This work shall include all preparation and painting, along with all mobilization, traffic control, disposal of waste and clean-up, as necessary to mark the curb head at this remote off-project location. The City of Marshfield can assist by placing temporary no parking signs at the site if needed.

Pavement Marking Curb Head, Yellow, Epoxy shall be measured and paid for per Lineal Foot, in accordance with Section 25.2 of the Standard Specifications. This item/quantity will be included on the Unit Price Schedule for the West 2nd Street Reconstruction Project.

68. REMOVE AND SALVAGE EXISTING SIGNS {2ND STREET RECONSTRUCTION PROJECTS}

The Contractor shall remove existing street signs and posts throughout the 2nd Street corridor and salvage these materials for reuse on the reconstruction projects (as noted in the signing plans/table), or for the City. All removed signs and posts shall be hauled, delivered and unloaded by the Contractor at the City's Sign Shop (101 South Oak Avenue) and inspected there. Most existing signs are mounted on posts (typically U-Channel) however some are mounted to power poles or buildings. The number of sign posts to be removed is estimated to be approximately 21 (may vary). Signs and/or posts to be reinstalled by the Contractor are described elsewhere within these Special Conditions.

Sign posts shall be carefully extracted/removed such that posts may be reused. Signs shall be disassembled from these posts. Signs shall be removed from power poles, complete including fasteners, brackets, straps, etc.

Signs shall be removed from buildings by loosening and removing fasteners, removing the sign, and repairing/filling damage to building faces (brick or other) caused by the sign/fasteners (review filler/repair materials with City Engineer, prior to use).

Remove Existing Signs shall be measured as a single Lump Sum unit of work regardless of the number of signs actually removed. Payment at the contract unit price shall constitute full compensation for all work described or implied herein, including but not limited to extracting, removing, dismantling, hauling, delivering, unloading, clean-up and disposal of waste, along with all mobilization, materials, labor, tools, equipment and incidentals necessary to complete the work.

69. PERMANENT SIGNS AND POSTS {2ND STREET RECONSTRUCTION PROJECTS}

Permanent Street Signs shall include salvaged and/or new signs and/or posts, to be installed by the Contractor in accordance with Section 25.3 of the Standard Specifications, modified per this Special Condition.

Recent reconstruction projects (Chestnut Avenue, 2013; and Maple Avenue, 2015) installed signs within the 2nd Street corridor. As indicated in the plans, these 'newer' signs and posts shall be salvaged and reinstalled on the proposed 2nd Street projects. Installation of salvaged signs and posts shall comply with the plans, details and all specifications for new signs and posts.

Bid items for new signs will be differentiated per type of sign face sheeting (measured per Square Foot):

- High Intensity Prismatic Retro-Reflective (HIPRR)
- Engineer Grade (EG)

The plans for the proposed one-way street(s) require that "Do Not Enter" signs be mounted back-to-back with stop signs. For these installations, the corners of the "Do Not Enter" signs (new or salvaged) shall be clipped/sheared (not sawed, ground, etc.) to mirror the shape of the corresponding stop sign. This alteration shall be considered incidental to construction, however the area of the clipped corners will not be deducted from the sign face as measured for payment (new signs).

All new U-Channel Posts (for street signs, 3 lb./ft.) shall include polyester powder coating, color = black.

Bid items for new U-Channel sign posts will be differentiated per length of post.

Special mounting brackets are required as shown in the plans, typically used to mount a cluster of signs perpendicular to each other, on a single post. A special bracket shall be provided, as suitably manufactured by a sign material supply company (not 'home-made') to professionally secure the proposed sign (typically large One-Way signs) to the top of a U-Channel post, perpendicular to the standard sign mounting for a U-channel post. All hardware shall be included and shall comply with Section 25.3.2 (Materials) of the Standard Specifications.

U-Channel Sign Posts which are located within concrete sidewalks shall require core drilling in accordance with Section 25.3.3 of the Standard Specifications however the size of the hole shall be 3-1/2 inches in diameter with the annular space around the post filled with gravel and capped with 1" of mortar. This work will be measured and paid for separately per the bid item 'Core-Drilling for U-Channel Posts, per Each.

Where shown on the plans, permanent signs shall be mounted to decorative street light poles. The City will provide the quantity of TracNuts and bolts as required to affix proposed permanent signs to the decorative street light poles. Additional TracNuts and bolts shall be charged to the Contractor. Contractor shall provide washers as required to protect sign faces.

Where shown on the plans or required by the City Engineer, permanent signs shall be mounted to utility poles (typically power poles owned by Marshfield Utilities). Contractor shall mount proposed signs to said poles per the pole owner's requirements. Any additional work or materials to mount these signs shall be considered incidental to construction.

Signs and posts shall be installed in accordance with plan details (sign posts within concrete sidewalks to be located 12-inches behind the back of the curb). The orientation of each sign shall be as shown on the signing plans. Signs (within sidewalks) wider than 24-inches and oriented perpendicular to the centerline shall be mounted offset (laterally) to the post by drilling new holes in the sign such that when mounted the inside edge of the sign aligns with the back of the curb (also

plumb, level, etc.). Use a heavier/thicker sign base (sheet aluminum) if necessary to withstand wind loads at locations with laterally offset sign mounting.

Street name signs will be provided and installed by others upon completion of Contractor's permanent signing work.

Installation of salvaged sign posts shall be measured and paid for as "Install Salvaged Sign Post", per Each. Note: The length of existing sign posts vary.

Installation of salvaged signs shall be measured and paid for as "Install Salvaged Sign" per Each sign. Note: the sizes of existing signs vary. Salvaged hardware may be re-used however the contractor is responsible for all hardware (new or salvaged) excluding Trac Nuts and bolts for mounting on decorative light poles.

"Special Top Bracket for U-Channel Post" shall be measured and paid for per Each.

70. BLOCK RETAINING WALL {1ST STREET & CEDAR AVENUE INTERSECTION RECONSTRUCTION PROJECT}

As shown on the plans, a block retaining wall is required on the 1st & Cedar Intersection Reconstruction Project. The proposed wall is to be located behind the proposed curb and gutter, intended to protect existing landscaping and public art features at this site.

Block Retaining Walls shall be as specified in Section 25.4 of the Standard Specifications, and shown on plan details, except for the following modifications:

- Wall type shall be a gravity segmental block wall without geogrid reinforcement.
- There are no storm sewers available for pipe underdrain discharge thus wall design shall accommodate drainage to ground surface.
- Block height shall be 6-inches.
- Color shall be as selected by the City Engineer. Provide a color chart of standard colors available for Engineer's selection.

71. TREE PIT PLANTER CURB {2ND STREET RECONSTRUCTION PROJECTS}

Raised planter curb shall be constructed as shown on the plans. Shapes and alignment of curbed areas vary. This work will include excavation, formwork, steel reinforcement, open graded base/backfill, concrete finishing and other work as described herein.

All materials to be incorporated into the work shall conform to pertinent sections of the Standard Specifications and these Special Provisions.

Curing compound shall comply with ASTM C1315 Type I Clear.

Sack Rubbed Finishing Mortar shall be submitted to the City Engineer for approval.

Excavate as necessary to accommodate formwork and provide Open Graded Base under the curb wall, without undermining adjacent existing surfaces to remain. The volume of excavation and base shall be incidental to the planter curb.

Form all walls inside and out. Forming shall include (vertical) rustication trim lines near corners (as shown on the plan details) and at intermediate locations spaced not less than 10-feet nor more than 15-feet.

Steel reinforcement shall be placed, lapped, tied and supported per the Standard Specifications. Additional reinforcement is required at corners where Power Pedestals are required (conduit to be placed with the planter curb corner).

Immediately after pouring, consolidating and finishing, cover the exposed fresh concrete with plastic. Leave covered until forms are removed.

All forms and bracing shall be completely removed. Immediately following form removal rub all surfaces to provide a sack-rubbed finish, using mortar approved by the City Engineer. Fill all holes, cavities, irregularities, honeycomb, etc. to provide a uniform appearance and texture, free of all blemishes.

Spray cure all exposed surfaces as soon as possible after sack-rub finishing.

Backfill outside the planter using Open Graded Base as shown on the details (compaction required). This volume of Open Graded Base shall be incidental to the planter curb.

Provide Planting Soil within the planters as specified elsewhere.

Tree Pit Planter Curb shall be measured per Lineal Foot, along the exterior face of the wall (at ground surface).

Payment will be made at the Contract Unit Price and shall be considered full compensation for all excavation, forming, reinforcement, installation, finishing, materials, backfilling and compacting, disposal of waste and clean-up, along with all labor, tools, equipment and incidentals necessary to complete the work.

72. PUBLIC ART BASE {2ND STREET RECONSTRUCTION PROJECTS}

Streetscape features for the 2nd Street Reconstruction Projects includes a stabilized concrete pad for supporting and displaying large pieces of public art. Public Art Bases(s) shall be constructed as shown on the plans and details, and in accordance with these Special Provisions and the Standard Specifications.

Concrete and steel reinforcement shall be as specified within these Special Conditions and elsewhere in the Standard Specifications, for items of similar construction.

Public Art Bases shall include an augured and formed hole, and be constructed of reinforced concrete similar to concrete street light base, but with an integral reinforced concrete slab (all poured continuous/concurrently).

Public Art Base(s) shall be measured per Each successfully installed. Payment will be made at the Contract Unit Price which shall be considered full compensation for all excavation, forming, reinforcement, installation, materials and disposal of waste, along with all labor, tools, equipment and incidentals necessary to complete the work.

Complete work at each individual work site promptly, with minimal periods of inactivity, thus requiring the Contractor to coordinate closely with Subcontractors.

PERMITS & APPROVALS

Portions of the proposed work on this project will require permits, licenses and/or approvals from various agencies. Said documents are included with these Special Provisions if available, or will be provided to the Contractor when available. These documents include:

Wisconsin Department of Natural Resources – Storm Water Permit (NR216)
Wisconsin Department of Natural Resources – Sewerage System Improvement
Wisconsin Department of Natural Resources – Water Distribution System Improvements

Contractors should note that if discrepancies are found between the plans and specifications and said permits, licenses and/or approvals, the permits, licenses and/or approvals will govern.

It will be understood that all Contractors must fully comply with all provisions of these permits as if the Contractor were the applicant of said permit.

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February 26, 2016

DEB HALL CLERK
CITY OF MARSHFIELD
630 S CENTRAL AVE
MARSHFIELD, WI 54449 0727

Acknowledgment of Receipt

The Department has received the following plan submittal and request for Department approval of a sewerage system project in accordance with s. 281.41 Statutes. If you have questions regarding the status of the project review, please contact the listed review engineer.

DATE RECEIVED: February 25, 2016

OWNER: MARSHFIELD, CITY

ENGINEER: THOMAS R. TURCHI, P.E.

PROJECT TYPE: PLANS & SPECS for SEWER

PROJECT DESCRIPTION: Sanitary sewer replacement in E. 2nd St. (Central Ave. to Maple Ave.), consisting of 8-inch (288 lf) PVC pipe to serve the City of Marshfield.

DNR PROJECT NUMBER: S-2016-0067

DNR REGION: WEST CENTRAL (WCR)

DNR REVIEWER: TREVOR MOEN

(608) 266-7385

FAX: (608) 267-2800

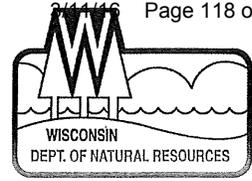
E-MAIL: TREVOR.MOEN@WISCONSIN.GOV

Copy To:

THOMAS R. TURCHI, P.E.
CITY OF MARSHFIELD
630 S CENTRAL AVE STE 622
MARSHFIELD, WI 54449 0727

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Fax 608-267-3579
TTY Access via relay - 711



February 26, 2016

DNR PROJECT NO. S-2016-0067
DNR REGION: WCR

DEB HALL CLERK
CITY OF MARSHFIELD
630 S CENTRAL AVE
MARSHFIELD, WI 54449 0727

DNR PLAN APPROVAL for SEWERAGE SYSTEM IMPROVEMENT

Wastewater System Owner: MARSHFIELD, CITY
Consultant: CITY OF MARSHFIELD
Engineer: THOMAS R. TURCHI, P.E.
Date Project Received: February 25, 2016
Project Description: PLANS & SPECS for SEWER
Sanitary sewer replacement in E. 2nd St. (Central Ave. to Maple Ave.),
consisting of 8-inch (288 lf) PVC pipe to serve the City of Marshfield.

The proposed sewerage system improvement included in the above referenced plan submittal is hereby approved in accordance with s. 281.41, Wis. Stats., subject to the following conditions:

1. That a preconstruction conference be held to familiarize the contractor(s) and inspector(s) with the plans, specifications, and conditions of approval.
2. That a competent resident inspector be provided during the course of construction.
3. That erosion control methods be used to prevent siltation to lands and waterways in the vicinity of the construction activity.
4. That all storm and other clear water, including that from sump pumps, roof drains, cistern overflows, and building foundation drains be excluded from these approved sewers (not applicable for combined sewers).
5. That the improvements be installed in accordance with the approved plans and specifications, and the above conditions, or subsequent essential and approved modifications.

This approval is valid for four years from the date of approval. The Department reserves the right to order changes or additions should conditions arise making this necessary.

If you believe you have a right to appeal this decision, you may file a request for a contested case hearing pursuant to s. 227.42, Wis. Stats., or file for judicial review under s. 227.52 and 227.53, Statutes. You have 30 days after this approval is mailed to file your written request for hearing or file and serve your petition for judicial review. Your request for hearing or petition for judicial review must name the Secretary of the Department as respondent. This notice is provided pursuant to s. 227.48, Statutes.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

For: Barton T. Chapman, P.E.
Chief, Wastewater Section

cc: Engineer

TRUCK ROUTE MAP

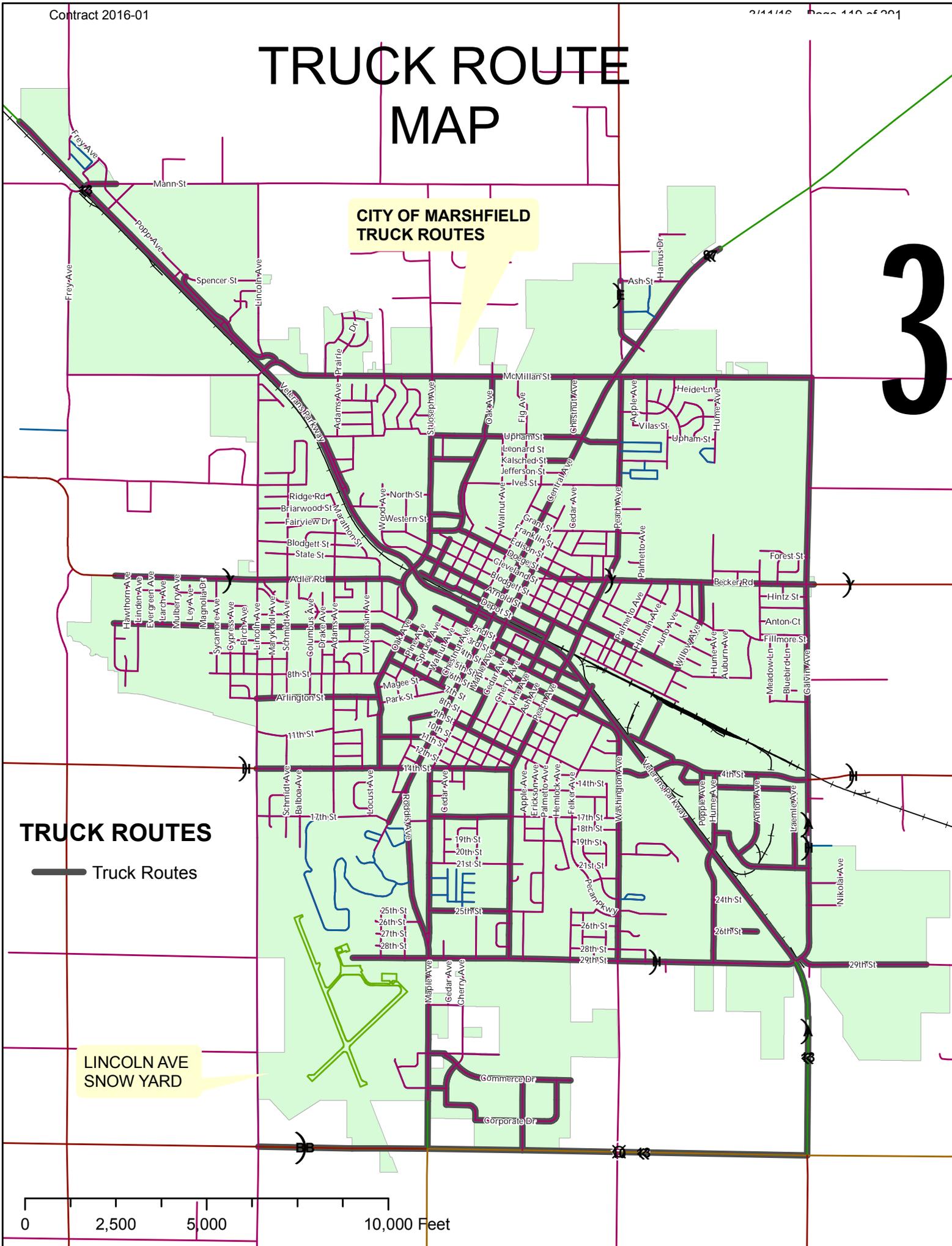
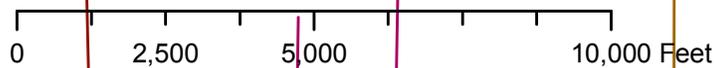
CITY OF MARSHFIELD TRUCK ROUTES

3

TRUCK ROUTES

— Truck Routes

LINCOLN AVE SNOW YARD



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ATTACH
CERTIFICATE
OF
INSURANCE
**ALL ENDORCEMENTS FOR
ADDITIONAL INSURED SHALL BE
INCLUDED**
HERE

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CONTRACT 2016-01

This agreement made this ____ day of _____, **2016** by and between _____ hereinafter called the '**CONTRACTOR**' and the City of Marshfield, Wisconsin, hereinafter called the '**OWNER**', WITNESSETH,
That the Contractor and the Owner, for the consideration hereinafter stated, agree as follows:

Article I, Scope of Work:

The Contractor shall perform everything required to be performed and shall provide and furnish all labor, materials, tools, equipment and plant which may be required, either expendable or permanent, also all utility and transportation services, all in strict accordance with the Plans, Specifications, and Contract Documents prepared by the City Engineer, sometimes referred to as the Engineer, which Plans and Specifications are made a part of this Contract, and in strict compliance with the Proposal and other Contract Documents herein mentioned which are also a part of this Contract; and the other documents constituting a part hereof.

Article II, The Contract Consideration of Prices:

PROPOSAL A

Oak Avenue (Depot Street to Cleveland Street) – Proj. No. 612865 – Plan No. 3590

Item No.	Item Description	Total Estimated Quantity	Unit	Unit Price
3-1	REMOVE CONCRETE PAVEMENT	38	SY	\$
3-2	REMOVE CONCRETE DRIVEWAYS AND SIDEWALK	1374	SY	\$
3-3	REMOVE ASPHALT SURFACE	171	SY	\$
3-4	SAW CONCRETE PAVEMENT - FULL DEPTH	132	LF	\$
3-5	SAW CONCRETE DRIVEWAYS AND SIDEWALKS	107	LF	\$
3-6	SAW EXISTING CURB HEAD	99	LF	\$
3-7	SAW ASPHALTIC SURFACE	626	LF	\$
4-1	EXCAVATION	148	CY	\$
4-2	EXCAVATION BELOW SUBGRADE	15	CY	\$
4-3	BORROW	15	CY	\$
5-1	BASE AGGREGATE DENSE, 1-1/4 INCH, IN-PLACE	196	CY	\$
5-2	DISINTEGRATED GRANITE DRIVEWAY SURFACE, IN-PLACE	11	CY	\$
5-3	PLACE ASPHALT MILLINGS, IN PLACE	17	SY	\$
11-1	CONCRETE DRIVEWAYS - 6", REINFORCED	236	EA	\$
11-2	CONCRETE DRIVEWAYS - 8", REINFORCED	20	SY	\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	144	SY	\$

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15-1	CONCRETE SIDEWALK - 4"	8473	LF	\$	
15-2	CONCRETE SIDEWALK - 6", REINFORCED	2190	SF	\$	
15-3	CONCRETE SIDEWALK - 8", REINFORCED	120	SF	\$	
15-4	INSTALL CURB RAMP DETECTABLE WARNING FIELD (5-FT WIDE)	140	SF	\$	
15-5	CONCRETE STEP	1	SF	\$	
16-1	FINISHED TERRACES - CITY SEED MIX 2016	1461	SY	\$	
17-1	DRILLED PAVEMENT TIES	60	EA	\$	
18-3	INLET PROTECTION TYPE C	15	EA	\$	
18-4	CULVERT PIPE DITCH CHECK	3	EA	\$	
18-5	DUST CONTROL	1	EA	\$	
18-6	STREET SWEEPING	1	EA	\$	
24-1	TRAFFIC CONTROL	1	LS	\$	

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PROPOSAL - B

Alley (Chestnut / Central – 5th / 6th) – Proj. No. 312017 – Plan No. 3598

Item No.	Item Description	Total Estimated Quantity	Unit	Unit Price
3-1	REMOVE CONCRETE PAVEMENT	538	SY	\$
3-2	REMOVE ASPHALT SURFACE	145	SY	\$
3-4	SAW ASPHALTIC SURFACE	440	LF	\$
4-1	EXCAVATION	281	CY	\$
4-2	EXCAVATION BELOW SUBGRADE	28	CY	\$
4-3	BORROW	28	CY	\$
5-1	BASE AGGREGATE OPEN GRADED, IN-PLACE	114	CY	\$
5-2	SELECT CRUSHED MATERIAL, IN-PLACE	180	CY	\$
5-3	GEOTEXTILE FABRIC, TYPE SAS	541	SY	\$
6-1	STORM LATERAL 6" PVC	24	LF	\$
6-2	STORM LATERAL 8" PVC	24	LF	\$
6-3	STORM LATERAL 10" PVC	2	LF	\$
6-4	CONNECT TO EXISTING STM SEWER (TAP)	5	EA	\$
6-5	STORM SEWER 6" SICPPP PIPE UNDERDRAIN - WRAPPED TRENCH	303	LF	\$
6-6	CONNECT NEW PIPE UNDERDRAIN TO EXISTING CATCH BASIN	1	EA	\$
8-1	CB COVER - TYPE C	1	EA	\$
9-1	ADJUST MH - STM	1	EA	\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	541	SY	\$
15-1	SEAL EXPANSION JOINT	45	LF	\$
18-1	INLET PROTECTION TYPE B	3	EA	\$
18-2	INLET PROTECTION TYPE C	2	EA	\$
18-3	DUST CONTROL	2	EA	\$

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18-4	STREET SWEEPING	2	EA	\$	
24-1	TRAFFIC CONTROL	1	LS	\$	
25-1	POLYSTYRENE INSULATION BOARD - 2" (AASHTO M230 / 40 PSI MIN)	1056	SF	\$	

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PROPOSAL - C

1st Street & Cedar Avenue - Intersection – Proj. No. 312238 – Plan No. 3599

Item No.	Item Description	Total Estimated Quantity	Unit	Unit Price
3-1	REMOVE CONCRETE PAVEMENT	99	SY	\$
3-2	REMOVE CONCRETE SIDEWALK	38	SY	\$
3-3	SAW CONCRETE PAVEMENT - FULL DEPTH	33	LF	\$
3-4	SAW CONCRETE SIDEWALKS	10	LF	\$
4-1	EXCAVATION	265	CY	\$
4-2	EXCAVATION BELOW SUBGRADE	25	CY	\$
4-3	BORROW	25	CY	\$
5-1	BASE AGGREGATE DENSE, 1-1/4-IN, IN-PLACE	117	CY	\$
5-2	SALVAGE AND RESPREAD EXISTING GRAVEL	129	SY	\$
5-3	GEOTEXTILE FABRIC, TYPE SAS	329	SY	\$
8-1	MH COVER - TYPE JM	1	EA	\$
9-1	EXTERNAL CHIMNEY SEAL	1	EA	\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	252	SY	\$
11-2	CONCRETE DRIVEWAYS - 8"	29	SY	\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	154	LF	\$
15-1	CONCRETE SIDEWALK - 4"	461	SF	\$
15-2	CONCRETE SIDEWALK - 6"	98	SF	\$
15-3	CONCRETE SIDEWALK - 8"	120	SF	\$
15-4	INSTALL CURB RAMP DETECTABLE WARNING FIELD (5-FT WIDE)	20	SF	\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	136	SY	\$
16-2	FINISHED PLANTING AREA	9	SY	\$

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17-1	DRILLED DOWEL BARS - 1-1/4" x 18"	22	EA	\$	
18-1	INLET PROTECTION TYPE C	2	EA	\$	
18-2	DUST CONTROL	1	EA	\$	
18-3	STREET SWEEPING	1	EA	\$	
20-1	EXTERNAL CHIMNEY SEAL	1	EA	\$	
24-1	TRAFFIC CONTROL	1	LS	\$	
25-1	RETAINING WALL	77	SF	\$	

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PROPOSAL - D

2nd Street (Chestnut Avenue to Central Avenue) – Proj. No. 312219 – Plan No. 3600

Item No.	Item Description	Total Estimated Quantity	Unit	Unit Price
3-1	REMOVE CONCRETE PAVEMENT	766	SY	\$
3-2	REMOVE CURB & GUTTER	596	LF	\$
3-3	REMOVE CONCRETE DRIVEWAYS AND SIDEWALK	305	SY	\$
3-4	REMOVE ASPHALT SURFACE	20	SY	\$
3-5	SAW CONCRETE PAVEMENT - FULL DEPTH	691	LF	\$
3-6	SAW CONCRETE DRIVEWAYS AND SIDEWALKS	844	LF	\$
4-1	EXCAVATION	20	CY	\$
5-1	BASE AGGREGATE DENSE 3/4-INCH, IN-PLACE	3	CY	\$
5-2	BASE AGGREGATE OPEN GRADED, IN-PLACE	64	CY	\$
5-3	GEOTEXTILE FABRIC, TYPE DF SCHEDULE A	58	SY	\$
5-4	GEOTEXTILE FABRIC, TYPE SAS	201	SY	\$
6-1	STORM SEWER 12" RCP - CLASS III	56	LF	\$
6-2	STORM SEWER 6" SICPP	14	LF	\$
6-3	STORM SEWER 6" SICPPP PIPE UNDERDRAIN - WRAPPED TRENCH	5	LF	\$
6-4	INSERTA-TEE CONNECTION, 6" SICPP TO 15" SICPP	1	EA	\$
6-5	CONNECT STORM SEWER TO EXISTING CB (CORE HOLE)	2	EA	\$
7-1	CB TYPE 2	4	EA	\$
8-1	CB COVER - TYPE H	1	EA	\$
8-2	CB COVER - TYPE H-S	4	EA	\$
8-3	MH COVER - TYPE J	2	EA	\$
8-4	MH COVER - TYPE J-LP	1	EA	\$
9-1	ADJUST CB	1	EA	\$

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9-2	RECONSTRUCT CB	3	EA	\$
10-1	REMOVE CATCH BASIN & CONNECTING PIPES	1	EA	\$
10-2	REMOVE CONCRETE BASE - SIGNAL	2	EA	\$
10-3	ABANDON PULL BOX	1	LS	\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	289	SY	\$
11-2	CONCRETE PAVEMENT, INTEGRAL - 8" (DOWELED)	27	SY	\$
11-3	COLORED CONCRETE CROSSWALKS, 8" (DOWELED)	35	SY	\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	401	LF	\$
13-2	CONCRETE CURB & GUTTER - 30" TYPE D	236	LF	\$
13-3	CONCRETE PEDESTRIAN CURB	5	LF	\$
13-4	CONCRETE PEDESTRIAN CURB & GUTTER	5	LF	\$
15-1	CONCRETE SIDEWALK - 5"	453	SF	\$
15-2	CONCRETE SIDEWALK - 6", REINFORCED	1287	SF	\$
15-3	COLORED CONCRETE SIDEWALK - 5"	1702	SF	\$
15-4	COLORED CONCRETE SIDEWALK - 8", REINFORCED	119	SF	\$
15-5	INSTALL CURB RAMP DETECTABLE WARNING FIELD (4-FT WIDE)	48	SF	\$
15-6	SEAL EXPANSION JOINT	10	LF	\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	4	SY	\$
16-2	PERMEABLE PAVERS OVER CONCRETE	1354	SF	\$
16-3	PLANTING SOIL	138	CY	\$
16-4	PLANTING SOIL / ROOT CELL SUPPORT MATRIX	524	SF	\$
16-5	HARDWOOD MULCH	160	SY	\$
16-6	STONE MULCH	5	SY	\$
16-7	TREE GRATE (WITH TREE GUARD)	3	EA	\$
16-8	RED OAK, Quercus rubra, 4" B & B	1	EA	\$
16-9	AUTUMN GOLD' GINGKO, Ginkgo biloba 'Autumn Gold', 4" B & B	1	EA	\$
16-10	SKYLINE 'HONEY LOCUST', Gleditsia triancathos 'Skyline', 5" B & B	1	EA	\$

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16-11	SWAMP WHITE OAK, Quercus bicolor, 5" B & B	2	EA	\$
16-12	IVORY SILK JAPANESE TREE LILAC, Syringa reticulata 'Ivory Silk', 2.5" B & B	3	EA	\$
16-13	AUTUMN BRILLIANCE SERVICEBERRY, Amelanchier grand 'Autumn Brilliance', 8" B & B, multi-stem	3	EA	\$
16-14	SKYROCKET JUNIPER, Juniperus scopulorum 'Skyrocket', 36" B & B	19	EA	\$
16-15	BLACK CHOKECHERRY, Aronia melanocarpa var. elata, #5 container	24	EA	\$
16-16	NEON FLASH SPIREA, Spirea japonica 'Neon Flash', #3 container	15	EA	\$
16-17	LITTLE DEVIL NINEBARK, Physocarpus opulifolius 'Little Devil', #5 container	4	EA	\$
16-18	SEAGREEN JUNIPER, Juniperus chinensis 'Seagreen', #5 container	10	EA	\$
16-19	BROADMOOR JUNIPER, Juniperus sabina 'Broadmoor', #5 container	46	EA	\$
16-20	STELLA DE ORO DAYLILY, Hemerocallis 'Stella de Oro', #1 container	46	EA	\$
16-21	PARDON ME DAYLILY, Hemerocallis 'Pardon Me', #1 container	27	EA	\$
16-22	RED VOLUNTEER DAYLILY, Hemerocallis 'Red Volunteer', #1 container	14	EA	\$
16-23	GOLDSTURM BLACK-EYED SUSAN, Rudbeckia fulgida 'Goldsturm'	28	EA	\$
16-24	AUTUMN JOY SEDUM, Sedum telephium 'Autumn Joy'	28	EA	\$
17-1	DRILLED PAVEMENT TIES	253	EA	\$
17-2	DRILLED DOWEL BARS - 1-1/4" x 18"	48	EA	\$
18-2	INLET PROTECTION TYPE B	1	EA	\$
18-3	INLET PROTECTION TYPE C	11	EA	\$
18-4	DUST CONTROL	2	EA	\$
18-5	STREET SWEEPING	2	EA	\$
22-1	NONMETALLIC CONDUIT, 1" (SCHEDULE 80)	584	LF	\$
22-2	NONMETALLIC CONDUIT, 1-1/2" (SCHEDULE 80)	336	LF	\$
22-3	NONMETALLIC CONDUIT, 2" - BORED	43	LF	\$
22-5	PULL BOX, 24"X36"	2	EA	\$
22-6	ELECTRICAL WIRE, NO. 6 (GROUND WIRE)	1139	LF	\$
22-7	ELECTRICAL WIRE, NO. 4	3346	LF	\$
22-8	CONCRETE BASE, TYPE 5 MODIFIED - BOLLARD	7	EA	\$

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22-9	INSTALL LIGHTED BOLLARD	7	EA	\$	
22-10	POWER PEDESTAL	12	EA	\$	
24-1	TRAFFIC CONTROL	1	LS	\$	
25-1	PUBLIC ART BASE	1	EA	\$	
25-2	TREE PIT PLANTER CURB	489	LF	\$	
25-3	REMOVE AND SALVAGE EXISTING SIGNS	1	LS	\$	
25-4	SIGNS, HIPRR	37	SF	\$	
25-5	SIGNS, EG	3	SF	\$	
25-6	INSTALL SALVAGED POST	9	EA	\$	
25-7	INSTALL SALVAGED SIGN	19	EA	\$	
25-8	SIGN POSTS, U-CHANNEL, BLACK, 16-FOOT	3	EA	\$	
25-9	CORE DRILLING FOR SIGN POST	7	EA	\$	
25-10	SPECIAL TOP BRACKET FOR U-CHANNEL POST	1	EA	\$	
25-11	PAVEMENT MARKING 4-INCH WHITE EPOXY	414	LF	\$	
25-12	PAVEMENT MARKING 6-INCH WHITE EPOXY	82	LF	\$	
25-13	PAVEMENT MARKING 12-INCH WHITE EPOXY	16	LF	\$	
25-14	PAVEMENT MARKING CURB HEAD YELLOW EPOXY	48	LF	\$	

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PROPOSAL - E

2nd Street (Central Avenue to Maple Avenue) – Proj. No. 312219, 312220, 352221 & 316774 – Plan No. 3601

Item No.	Item Description	Total Estimated Quantity	Unit	Unit Price
3-1	REMOVE CONCRETE PAVEMENT	1815	SY	\$
3-2	REMOVE CURB & GUTTER	338	LF	\$
3-3	REMOVE CONCRETE DRIVEWAYS AND SIDEWALK	603	SY	\$
3-4	REMOVE ASPHALT SURFACE	1419	SY	\$
3-5	SAW CONCRETE PAVEMENT - FULL DEPTH	222	LF	\$
3-6	SAW CONCRETE DRIVEWAYS AND SIDEWALKS	222	LF	\$
3-7	SAW ASPHALTIC SURFACE	142	LF	\$
4-1	EXCAVATION	1133	CY	\$
4-2	EXCAVATION BELOW SUBGRADE	10	CY	\$
4-3	BORROW	10	CY	\$
4-4	MANAGEMENT OF CONTAMINATED SOIL	110	TON	\$
5-1	BASE AGGREGATE DENSE 1 1/4-INCH, IN-PLACE	18	CY	\$
5-2	BASE AGGREGATE OPEN GRADED, IN-PLACE	331	CY	\$
5-3	BREAKER-RUN STONE, IN-PLACE	711	CY	\$
5-4	GEOTEXTILE FABRIC, TYPE SAS	1534	SY	\$
6-1	STORM SEWER 12" RCP - CLASS III	45	LF	\$
6-2	STORM SEWER 21" RCP - CLASS III	54	LF	\$
6-3	STORM LATERAL 6" PVC	20	LF	\$
6-4	STORM LATERAL 8" PVC	13	LF	\$
6-5	STORM SEWER CAP 15" PVC	1	EA	\$
6-6	STORM SEWER 6" SICPPP PIPE UNDERDRAIN - WRAPPED TRENCH	704	LF	\$

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7-1	CB TYPE 2	4	EA	\$	
8-1	CB COVER - TYPE E	2	EA	\$	
8-2	CB COVER - TYPE H	2	EA	\$	
8-3	MH COVER - TYPE J	2	EA	\$	
8-4	MH COVER - TYPE JM	1	EA	\$	
9-1	ADJUST MH - STM	1	EA	\$	
9-2	RECONSTRUCT CB - STM (#8)	1	LS	\$	
10-1	REMOVE CONCRETE BASE - SIGNAL / LIGHT	5	EA	\$	
10-2	ABANDON VAULT	137	SF	\$	
10-3	REMOVE FOUNDATION WALL	172	SF	\$	
10-4	REMOVE MH - STM	1	EA	\$	
10-5	REMOVE CATCH BASIN & CONNECTING PIPES	4	EA	\$	
10-6	REMOVE STORM SEWER - 10" TO 18"	288	LF	\$	
10-7	REMOVE LATERAL - STORM	77	LF	\$	
10-8	REMOVE LATERAL - SANITARY	120	LF	\$	
10-9	BULKHEAD STORM SEWER	1	EA	\$	
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	1252	SY	\$	
11-2	COLORED CONCRETE CROSSWALKS, 8" (DOWELED)	36	SY	\$	
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	843	LF	\$	
13-2	CONCRETE CURB & GUTTER - 30" TYPE D	47	LF	\$	
13-3	CONCRETE PEDESTRIAN CURB	20	LF	\$	
13-4	CONCRETE PEDESTRIAN CURB & GUTTER	20	LF	\$	
15-1	CONCRETE SIDEWALK - 5"	2423	SF	\$	
15-2	CONCRETE SIDEWALK - 6", REINFORCED	1338	SF	\$	
15-3	CONCRETE SIDEWALK - 8", REINFORCED	756	SF	\$	
15-4	COLORED CONCRETE SIDEWALK - 5"	1400	SF	\$	
15-5	COLORED CONCRETE SIDEWALK - 8", REINFORCED	367	SF	\$	

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15-6	INSTALL CURB RAMP DETECTABLE WARNING FIELD (4-FT WIDE)	56	SF	\$
15-7	SEAL EXPANSION JOINT	350	LF	\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	18	SY	\$
16-2	PERMEABLE PAVERS OVER CONCRETE	803	SF	\$
16-3	PLANTING SOIL	98	CY	\$
16-4	HARDWOOD MULCH	146	SY	\$
16-5	RED OAK, Quercus rubra, 4" B & B	1	EA	\$
16-6	AUTUMN GOLD' GINGKO, Ginkgo biloba 'Autumn Gold', 4" B & B	1	EA	\$
16-7	SKYLINE 'HONEY LOCUST', Gleditsia triancathos 'Skyline', 5" B & B	2	EA	\$
16-8	PRAIRIEFIRE CRABAPPLE, Malus 'Prairiefire', 2.5" B & B	4	EA	\$
16-9	AUTUMN BRILLIANCE SERVICEBERRY, Amelanchier grand 'Autumn Brilliance', 8' B & B, multi-stem	3	EA	\$
16-10	BLACK CHOKECHERRY, Aronia melanocarpa var. elata, #5 container	9	EA	\$
16-11	NEON FLASH SPIREA, Spirea japonica 'Neon Flash', #3 container	12	EA	\$
16-12	LITTLE DEVIL NINEBARK, Physocarpus opulifolius 'Little Devil', #5 container	32	EA	\$
16-13	SEAGREEN JUNIPER, Juniperus chinensis 'Seagreen', #5 container	21	EA	\$
16-14	BROADMOOR JUNIPER, Juniperus sabina 'Broadmoor', #5 container	25	EA	\$
16-15	STELLA DE ORO DAYLILY, Hemerocallis 'Stella de Oro', #1 container	36	EA	\$
16-16	PARDON ME DAYLILY, Hemerocallis 'Pardon Me', #1 container	30	EA	\$
16-17	RED VOLUNTEER DAYLILY, Hemerocallis 'Red Volunteer', #1 container	4	EA	\$
16-18	GOLDSTURM BLACK-EYED SUSAN, Rudbeckia fulgida 'Goldsturm'	22	EA	\$
16-19	AUTUMN JOY SEDUM, Sedum telephium 'Autumn Joy'	20	EA	\$
17-1	DRILLED PAVEMENT TIES	70	EA	\$
17-2	DRILLED DOWEL BARS - 1 1/4" x 18"	12	EA	\$
18-2	INLET PROTECTION TYPE B	1	EA	\$
18-3	INLET PROTECTION TYPE C	6	EA	\$
18-4	DUST CONTROL	2	EA	\$
18-5	STREET SWEEPING	2	EA	\$

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19-1	WATER MAIN, 8" D.I.	323	LF	\$
19-2	WATER MAIN, 6" D.I.	3	LF	\$
19-3	WATER MAIN, 4" D.I.	3	LF	\$
19-4	FLUOROCARBON GASKETS, 8"	4	EA	\$
19-5	VALVE W/VALVE BOX, 8"	2	EA	\$
19-6	VALVE W/VALVE BOX, 6"	1	EA	\$
19-7	TEE, 8" X 8"	1	EA	\$
19-8	TEE, 8" X 6"	1	EA	\$
19-9	REDUCER, 8" X 4"	1	EA	\$
19-10	45 D BEND, 8"	4	EA	\$
19-11	SLEEVE, 8"	2	EA	\$
19-12	SLEEVE, 6"	1	EA	\$
19-13	SLEEVE, 4"	1	EA	\$
19-14	WATER MAIN 8" D.I. - VERTICAL OFFSET	1	EA	\$
19-15	CONNECT TO EXISTING WATER MAIN	4	EA	\$
19-16	CORPORATION STOP, 1"	1	EA	\$
19-17	CORPORATION STOP, 1 1/2"	1	EA	\$
19-18	CURB STOP W/BOX, 1"	1	EA	\$
19-19	CURB STOP W/BOX, 1 1/2"	1	EA	\$
19-20	WATER SERVICE, 1" COPPER	40	LF	\$
19-21	WATER SERVICE, 1 1/2" COPPER	20	LF	\$
19-22	FROST SLEEVE	2	EA	\$
19-23	TEMPORARY WATER	1	LS	\$
19-24	INSTALL TRENCH PLUGS	2	EA	\$
20-1	SANITARY SEWER - 8" PVC	228	LF	\$
20-2	SANITARY SEWER LATERAL - 6" PVC	60	LF	\$
20-3	8" x 6" PVC WYE	2	EA	\$

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20-4	MH TYPE 1 SAN	11.1	VF	\$
20-5	CONNECT TO EXISTING SAN SEWER - 8" PVC	1	EA	\$
22-1	NONMETALLIC CONDUIT, 1"	430	LF	\$
22-2	NONMETALLIC CONDUIT, 1-1/2"	316	LF	\$
22-3	NONMETALLIC CONDUIT, 2"	276	LF	\$
22-5	PULL BOX, 24"X36"	2	EA	\$
22-6	ELECTRICAL WIRE, NO. 12 (POLE WIRE)	384	LF	\$
22-7	ELECTRICAL WIRE, NO. 6 (GROUND WIRE)	1098	LF	\$
22-8	ELECTRICAL WIRE, NO. 4	3268	LF	\$
22-9	CONCRETE BASE, TYPE 5 MODIFIED - BOLLARD	6	EA	\$
22-10	CONCRETE BASE, TYPE 5 MODIFIED - 24" - B	2	EA	\$
22-12	INSTALL STREET LIGHT/POLES	2	EA	\$
22-13	INSTALL LIGHTED BOLLARD	6	EA	\$
22-14	POWER PEDESTAL	11	EA	\$
24-1	TRAFFIC CONTROL	1	LS	\$
25-1	PUBLIC ART BASE	1	EA	\$
25-2	TREE PIT PLANTER CURB	579	LF	\$
25-3	REMOVE AND SALVAGE EXISTING SIGNS	1	LS	\$
25-4	SIGNS, HIPRR	58	SF	\$
25-5	SIGNS, EG	2	SF	\$
25-6	INSTALL SALVAGED POST	5	EA	\$
25-7	INSTALL SALVAGED SIGN	3	EA	\$
25-8	SIGN POSTS, U-CHANNEL, BLACK, 12-FOOT	1	EA	\$
25-9	SIGN POSTS, U-CHANNEL, BLACK, 16-FOOT	3	EA	\$
25-10	CORE DRILLING FOR SIGN POST	6	EA	\$
25-11	SPECIAL TOP BRACKET FOR U-CHANNEL POST	1	EA	\$
25-12	PAVEMENT MARKING 4-INCH WHITE EPOXY	328	LF	\$

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25-13 PAVEMENT MARKING 6-INCH WHITE EPOXY	83	LF	\$	
25-14 PAVEMENT MARKING 12-INCH WHITE EPOXY	16	LF	\$	
25-14 PAVEMENT MARKING CURB HEAD YELLOW EPOXY	9	LF	\$	

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PROPOSAL - F

Colored Concrete Maintenance and Repairs - Central Avenue (17th Street to 2nd Street) - Chestnut Avenue (7th Street to 1st Street) - Project No. 312219

Item No.	Item Description	Total Estimated Quantity	Unit		Unit Price
3-1	REMOVE CONCRETE PAVEMENT	30	SY	\$	
3-2	REMOVE CONCRETE CURB & GUTTER	25	LF	\$	
3-3	SAW CONCRETE PAVEMENT - FULL DEPTH	150	LF	\$	
11-1	COLORED CONCRETE CROSSWALK PAVEMENT, 9-INCH	30	SY	\$	
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	25	LF	\$	
17-1	RE-SEAL EXISTING COLORED CONCRETE SURFACE	5531	SY	\$	
17-2	CLEAN, TREAT & RE-SEAL EXISTING CONCRETE PAVEMENT JOINTS	6,330	LF	\$	
17-3	EXISTING COLORED CONCRETE PARTIAL DEPTH REPAIR	381	SF	\$	
17-4	DRILLED PAVEMENT TIES	25	EA	\$	
17-5	DRILLED DOWEL BARS	40	EA	\$	
24-1	TRAFFIC CONTROL	1	LS	\$	

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All of which payments are to be made in accordance with the General Conditions and Specifications.

Article III, Component Parts of This Contract: This Contract consists of the following component parts, all of which are as fully a part of this Contract as if herein set forth verbatim and if not attached, as if hereto attached.

1. Advertisement of Bids
2. Instructions to Bidders
3. General Conditions
4. Specifications
5. Special Provisions
6. Plans
7. Wage Rate Schedule
8. Contractor's Proposal
9. This Instrument

In the event that any provision in any of the above component parts of this Contract conflicts with any provision in any other component part or parts, the Contractor shall in writing request a clarification of such conflict by the Engineer, and his clarification of such conflict, approved by the Owner's Board of Public Works, shall be final and binding upon the parties hereto.

Article IV, Guarantee: The Contractor agrees and guarantees that the equipment, materials, and workmanship supplied by him shall be free from all defects and strictly in accordance with the Plans and Specifications herein above referred to and accepted by the Owner; and for a period of twelve (12) months after completion of the Contract, in case of any cracks, settlement, leaks or other defects in work constructed by the Contractor, the Contractor agrees to promptly repair the same upon notification by the Owner, using materials meeting the requirements of the Specification, and in case the Contractor shall fail to make such repairs or cause the same to be made within thirty (30) days of the above mentioned notification, the Contractor agrees to pay upon demand the cost of thereof to the Owner after completion of such repairs, and the Contractor further agrees and guarantees to pay for all labor, material and equipment used in or about the construction covered by this Contract which may become a lien or claim against the Owner.

Article V, Locus of Contract: It is agreed that this Contract, regardless of where executed, shall be subject to and governed by the Law of the State of Wisconsin and shall for all purposes be deemed and regarded to be a Contract entered into the State of Wisconsin.

All of which payments are to be made in accordance with the General Conditions and Specifications.

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In Witness Whereof, the parties have caused this instrument to be executed in three (3) original counterparts on the day and year herein before stated.

Contractor

Address

Address

City, State, Zip

By:

Title

CITY OF MARSHFIELD ("OWNER")

Chris L. Meyer, Mayor

Deb M. Hall, City Clerk

Attest:

All of the Contract Documents have been examined as to form and are approved.

Harold Wolfgram, City Attorney

Provision is made to pay the liability that will accrue under this Contract.

Keith R. Strey, Finance Director

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PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____
 _____ as Principal,
 and _____ as Surety, are held
 and firmly bound unto the City of Marshfield, Wisconsin hereinafter called the Owner, in the penal sum of
 _____ Dollars, lawful money of the United
 States, for the payment of which sum well and truly made, we bind ourselves, our heirs, executors,
 administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of this obligation is that whereas the Principal has executed and attached a
 contract dated _____, 20 _____, for the construction of
 _____;
 _____;

Now therefore, if said attached contract is executed on behalf of the Owner, the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the proposal, contract and other contract documents as accepted and any and all duly authorized extensions or modifications of said contract documents that may hereafter be made, shall pay to each and every person or party entitled thereto all the claims for work or labor performed or material furnished, including premiums for Worker's Compensation Insurance, for or in or about or under such contract as provided in Section 102 and 779 of the Wisconsin Statutes, and any such authorized extension or modification thereof, then this obligation is to be void; otherwise to remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, alteration or addition to the terms of the contract or the work to be performed thereunder or the contract documents accompanying the same shall in any way effect its obligations under this bond, and it does hereby waive notice of any such change, alteration or addition to the terms of the contract, to the work or to the contract documents.

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In witness whereof, the above bounden parties have executed this instrument in three original counterparts under their several seals this _____ day of _____, 20 _____

The name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representatives, pursuant to authority of its governing body.

In the presence of:

Individual Principal _____SEAL

Address Business Address

Individual Principal

Business Address

Attest: _____
Corporate Principal

Business Address

BY: _____
(Type) CORPORATE SEAL

Attest: _____
Corporate Surety

Business Address

BY: _____
(Type) CORPORATE SEAL

Approved this _____ day of _____, 20 _____

Deb M. Hall, City Clerk

Chris L. Meyer, Mayor

Keith Strey, Finance Director

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**CITY OF MARSHFIELD, WISCONSIN
PROPOSAL FOR CONTRACT 2016-01
Contract 2016-01**

A. Oak Avenue (Depot Street to Cleveland Street) – Proj. No. 612865 – Plan No. 3590

B. Alley (Chestnut / Central – 5th / 6th) – Proj. No. 312017 – Plan No. 3598

C. 1st Street & Cedar Avenue - Intersection – Proj. No. 312238 – Plan No. 3599

D. 2nd Street (Chestnut Avenue to Central Avenue) – Proj. No. 312219 – Plan No. 3600

E. 2nd Street (Central Avenue to Maple Avenue) – Proj. No. 312219, 312220, 352221 & 316774 – Plan No. 3601

F. Colored Concrete Maintenance and Repairs - Central Avenue (17th Street to 2nd Street) - Chestnut Avenue (7th Street to 1st Street) - Plan No. 3610 - Project No. 312219

Bids Received until 4:00 PM and Opened at 4:05 PM DATE: March 28, 2016

Proposal submitted by the undersigned Bidder to the City of Marshfield, Wisconsin, in accordance with the Notice to Bidders, to furnish and deliver all materials, and to do and perform all work for the above named project, in accordance with the applicable Specifications, Plans, and Special Provisions for the work.

The undersigned Bidder, if awarded the Contract, agrees to begin work not later than ten (10) days after the date of written notification from the City Engineer to do so, and to complete the same in accordance with the Specifications and Special Provisions.

The undersigned Bidder, submitting this Proposal, hereby declares and agrees to be bound, and to perform the work in accordance with all the terms, conditions, and requirements of the within and foregoing Proposal, the Contract, the Specifications, the Special Provisions and the Plans.

The Bidder declares that he has carefully examined the project site(s), the Proposal, Plans, Specifications, and Contract form for the work contemplated, and it is assured that the bidder has investigated and is satisfied as to the conditions to be encountered as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the Specifications, Plans, Special Provisions, and Contract. It is mutually agreed that submission of a Proposal shall be considered conclusive evidence that the Bidder has made such examination.

The Bidder declares that he understands the estimate of quantities in the attached schedule is approximate only and that the attached quantities may be greater or less in accordance with the Specifications.

The Bidder agrees to perform the said work, for and in consideration of the payment of the amount becoming due on account of work performed, according to the unit prices bid in the following schedule, and to accept such amount in full payment for such work.

The Bidder declares that only the persons, firm, or corporation herein named have an interest in this Proposal and that the same is submitted without collusion with any person, firm, or corporation.

The Bidder declares that if he is awarded the Contract, he will execute the Contract agreement and begin and complete the work within the time named herein and he will file a contract bond in the sum of the total amount of the Contract to guarantee the successful execution of the work and will comply with the requirements of Chapter 102 of the Wisconsin Statutes dealing with Worker's Compensation.

The Bidder declares that if he is awarded the Contract, he will comply with the requirements relative to the maximum daily and weekly hours of labor and the Minimum Wage Rates set for various occupations or classifications of labor.

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PROPOSAL A

Oak Avenue (Depot Street to Cleveland Street) – Proj. No. 612865 – Plan No. 3590

Item No.	Item Description	Total Estimated Quantities	Unit	Unit Price	Total Amount
3-1	REMOVE CONCRETE PAVEMENT	38	SY	\$	\$
3-2	REMOVE CONCRETE DRIVEWAYS AND SIDEWALK	1374	SY	\$	\$
3-3	REMOVE ASPHALT SURFACE	171	SY	\$	\$
3-4	SAW CONCRETE PAVEMENT - FULL DEPTH	132	LF	\$	\$
3-5	SAW CONCRETE DRIVEWAYS AND SIDEWALKS	107	LF	\$	\$
3-6	SAW EXISTING CURB HEAD	99	LF	\$	\$
3-7	SAW ASPHALTIC SURFACE	626	LF	\$	\$
4-1	EXCAVATION	148	CY	\$	\$
4-2	EXCAVATION BELOW SUBGRADE	15	CY	\$	\$
4-3	BORROW	15	CY	\$	\$
5-1	BASE AGGREGATE DENSE, 1-1/4 INCH, IN-PLACE	196	CY	\$	\$
5-2	DISINTEGRATED GRANITE DRIVEWAY SURFACE, IN-PLACE	11	CY	\$	\$
5-3	PLACE ASPHALT MILLINGS, IN PLACE	17	SY	\$	\$
11-1	CONCRETE DRIVEWAYS - 6", REINFORCED	236	EA	\$	\$
11-2	CONCRETE DRIVEWAYS - 8", REINFORCED	20	SY	\$	\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	144	SY	\$	\$
15-1	CONCRETE SIDEWALK - 4"	8473	LF	\$	\$
15-2	CONCRETE SIDEWALK - 6", REINFORCED	2190	SF	\$	\$
15-3	CONCRETE SIDEWALK - 8", REINFORCED	120	SF	\$	\$
15-4	INSTALL CURB RAMP DETECTABLE WARNING FIELD (5-FT WIDE)	140	SF	\$	\$
15-5	CONCRETE STEP	1	SF	\$	\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	1461	SY	\$	\$

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17-1	DRILLED PAVEMENT TIES	60	EA	\$	_____	\$	_____
18-3	INLET PROTECTION TYPE C	15	EA	\$	_____	\$	_____
18-4	CULVERT PIPE DITCH CHECK	3	EA	\$	_____	\$	_____
18-5	DUST CONTROL	1	EA	\$	_____	\$	_____
18-6	STREET SWEEPING	1	EA	\$	_____	\$	_____
24-1	TRAFFIC CONTROL	1	LS	\$	_____	\$	_____

TOTAL AMOUNT OF BID PROPOSAL 'A' \$

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PROPOSAL - B

Alley (Chestnut / Central – 5th / 6th) – Proj. No. 312017 – Plan No. 3598

Item No.	Item Description	Total Estimated	Unit	Unit Price	Total Amount
3-1	REMOVE CONCRETE PAVEMENT	538	SY	\$	\$
3-2	REMOVE ASPHALT SURFACE	145	SY	\$	\$
3-4	SAW ASPHALTIC SURFACE	440	LF	\$	\$
4-1	EXCAVATION	281	CY	\$	\$
4-2	EXCAVATION BELOW SUBGRADE	28	CY	\$	\$
4-3	BORROW	28	CY	\$	\$
5-1	BASE AGGREGATE OPEN GRADED, IN-PLACE	114	CY	\$	\$
5-2	SELECT CRUSHED MATERIAL, IN-PLACE	180	CY	\$	\$
5-3	GEOTEXTILE FABRIC, TYPE SAS	541	SY	\$	\$
6-1	STORM LATERAL 6" PVC	24	LF	\$	\$
6-2	STORM LATERAL 8" PVC	24	LF	\$	\$
6-3	STORM LATERAL 10" PVC	2	LF	\$	\$
6-4	CONNECT TO EXISTING STM SEWER (TAP)	5	EA	\$	\$
6-5	STORM SEWER 6" SICPPP PIPE UNDERDRAIN - WRAPPED TRENCH	303	LF	\$	\$
6-6	CONNECT NEW PIPE UNDERDRAIN TO EXISTING CATCH BASIN	1	EA	\$	\$
8-1	CB COVER - TYPE C	1	EA	\$	\$
9-1	ADJUST MH - STM	1	EA	\$	\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	541	SY	\$	\$
15-1	SEAL EXPANSION JOINT	45	LF	\$	\$
18-1	INLET PROTECTION TYPE B	3	EA	\$	\$
18-2	INLET PROTECTION TYPE C	2	EA	\$	\$
18-3	DUST CONTROL	2	EA	\$	\$
18-4	STREET SWEEPING	2	EA	\$	\$

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24-1	TRAFFIC CONTROL	1	LS	\$	_____	\$	_____
25-1	POLYSTYRENE INSULATION BOARD - 2" (AASHTO M230 / 40 PSI MIN)	1056	SF	\$	_____	\$	_____

TOTAL AMOUNT OF BID PROPOSAL 'B' \$

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PROPOSAL - C**1st Street & Cedar Avenue - Intersection – Proj. No. 312238 – Plan No. 3599**

Item No.	Item Description	Total Estimated	Unit	Unit Price	Total Amount
3-1	REMOVE CONCRETE PAVEMENT	99	SY	\$	\$
3-2	REMOVE CONCRETE SIDEWALK	38	SY	\$	\$
3-3	SAW CONCRETE PAVEMENT - FULL DEPTH	33	LF	\$	\$
3-4	SAW CONCRETE SIDEWALKS	10	LF	\$	\$
4-1	EXCAVATION	265	CY	\$	\$
4-2	EXCAVATION BELOW SUBGRADE	25	CY	\$	\$
4-3	BORROW	25	CY	\$	\$
5-1	BASE AGGREGATE DENSE, 1-1/4-IN, IN-PLACE	117	CY	\$	\$
5-2	SALVAGE AND RESPREAD EXISTING GRAVEL	129	SY	\$	\$
5-3	GEOTEXTILE FABRIC, TYPE SAS	329	SY	\$	\$
8-1	MH COVER - TYPE JM	1	EA	\$	\$
9-1	EXTERNAL CHIMNEY SEAL	1	EA	\$	\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	252	SY	\$	\$
11-2	CONCRETE DRIVEWAYS - 8"	29	SY	\$	\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	154	LF	\$	\$
15-1	CONCRETE SIDEWALK - 4"	461	SF	\$	\$
15-2	CONCRETE SIDEWALK - 6"	98	SF	\$	\$
15-3	CONCRETE SIDEWALK - 8"	120	SF	\$	\$
15-4	INSTALL CURB RAMP DETECTABLE WARNING FIELD (5-FT WIDE)	20	SF	\$	\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	136	SY	\$	\$
16-2	FINISHED PLANTING AREA	9	SY	\$	\$
17-1	DRILLED DOWEL BARS - 1-1/4" x 18"	22	EA	\$	\$
18-1	INLET PROTECTION TYPE C	2	EA	\$	\$

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18-2	DUST CONTROL	1	EA	\$	_____	\$	_____
18-3	STREET SWEEPING	1	EA	\$	_____	\$	_____
20-1	EXTERNAL CHIMNEY SEAL	1	EA	\$	_____	\$	_____
24-1	TRAFFIC CONTROL	1	LS	\$	_____	\$	_____
25-1	RETAINING WALL	77	SF	\$	_____	\$	_____

TOTAL AMOUNT OF BID PROPOSAL 'C' \$

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PROPOSAL - D

2nd Street (Chestnut Avenue to Central Avenue) – Proj. No. 312219 – Plan No. 3600

Item No.	Item Description	Total Estimated	Unit	Unit Price	Total Amount
3-1	REMOVE CONCRETE PAVEMENT	766	SY	\$	\$
3-2	REMOVE CURB & GUTTER	596	LF	\$	\$
3-3	REMOVE CONCRETE DRIVEWAYS AND SIDEWALK	305	SY	\$	\$
3-4	REMOVE ASPHALT SURFACE	20	SY	\$	\$
3-5	SAW CONCRETE PAVEMENT - FULL DEPTH	691	LF	\$	\$
3-6	SAW CONCRETE DRIVEWAYS AND SIDEWALKS	844	LF	\$	\$
4-1	EXCAVATION	20	CY	\$	\$
5-1	BASE AGGREGATE DENSE 3/4-INCH, IN-PLACE	3	CY	\$	\$
5-2	BASE AGGREGATE OPEN GRADED, IN-PLACE	64	CY	\$	\$
5-3	GEOTEXTILE FABRIC, TYPE DF SCHEDULE A	58	SY	\$	\$
5-4	GEOTEXTILE FABRIC, TYPE SAS	201	SY	\$	\$
6-1	STORM SEWER 12" RCP - CLASS III	56	LF	\$	\$
6-2	STORM SEWER 6" SICPP	14	LF	\$	\$
6-3	STORM SEWER 6" SICPPP PIPE UNDERDRAIN - WRAPPED TRENCH	5	LF	\$	\$
6-4	INSERTA-TEE CONNECTION, 6" SICPP TO 15" SICPP	1	EA	\$	\$
6-5	CONNECT STORM SEWER TO EXISTING CB (CORE HOLE)	2	EA	\$	\$
7-1	CB TYPE 2	4	EA	\$	\$
8-1	CB COVER - TYPE H	1	EA	\$	\$
8-2	CB COVER - TYPE H-S	4	EA	\$	\$
8-3	MH COVER - TYPE J	2	EA	\$	\$
8-4	MH COVER - TYPE J-LP	1	EA	\$	\$
9-1	ADJUST CB	1	EA	\$	\$
9-2	RECONSTRUCT CB	3	EA	\$	\$

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10-1	REMOVE CATCH BASIN & CONNECTING PIPES	1	EA	\$		\$
10-2	REMOVE CONCRETE BASE - SIGNAL	2	EA	\$		\$
10-3	ABANDON PULL BOX	1	LS	\$		\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	289	SY	\$		\$
11-2	CONCRETE PAVEMENT, INTEGRAL - 8" (DOWELED)	27	SY	\$		\$
11-3	COLORED CONCRETE CROSSWALKS, 8" (DOWELED)	35	SY	\$		\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	401	LF	\$		\$
13-2	CONCRETE CURB & GUTTER - 30" TYPE D	236	LF	\$		\$
13-3	CONCRETE PEDESTRIAN CURB	5	LF	\$		\$
13-4	CONCRETE PEDESTRIAN CURB & GUTTER	5	LF	\$		\$
15-1	CONCRETE SIDEWALK - 5"	453	SF	\$		\$
15-2	CONCRETE SIDEWALK - 6", REINFORCED	1287	SF	\$		\$
15-3	COLORED CONCRETE SIDEWALK - 5"	1702	SF	\$		\$
15-4	COLORED CONCRETE SIDEWALK - 8", REINFORCED	119	SF	\$		\$
15-5	INSTALL CURB RAMP DETECTABLE WARNING FIELD (4-FT WIDE)	48	SF	\$		\$
15-6	SEAL EXPANSION JOINT	10	LF	\$		\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	4	SY	\$		\$
16-2	PERMEABLE PAVERS OVER CONCRETE	1354	SF	\$		\$
16-3	PLANTING SOIL	138	CY	\$		\$
16-4	PLANTING SOIL / ROOT CELL SUPPORT MATRIX	524	SF	\$		\$
16-5	HARDWOOD MULCH	160	SY	\$		\$
16-6	STONE MULCH	5	SY	\$		\$
16-7	TREE GRATE (WITH TREE GUARD)	3	EA	\$		\$
16-8	RED OAK, Quercus rubra, 4" B & B	1	EA	\$		\$
16-9	AUTUMN GOLD' GINGKO, Ginkgo biloba 'Autumn Gold', 4" B & B	1	EA	\$		\$
16-10	SKYLINE 'HONEY LOCUST', Gleditsia triancathos 'Skyline', 5" B & B	1	EA	\$		\$
16-11	SWAMP WHITE OAK, Quercus bicolor, 5" B & B	2	EA	\$		\$
16-12	IVORY SILK JAPANESE TREE LILAC, Syringa reticulata 'Ivory Silk', 2.5" B & B	3	EA	\$		\$
16-13	AUTUMN BRILLIANCE SERVICEBERRY, Amelanchier grand 'Autumn Brilliance', 8" B & B, multi stem	3	EA	\$		\$

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16-14	SKYROCKET JUNIPER, Juniperus scopulorum 'Skyrocket', 36" B & B	19	EA	\$	\$
16-15	BLACK CHOKECHERRY, Aronia melanocarpa var. elata, #5 container	24	EA	\$	\$
16-16	NEON FLASH SPIREA, Spirea japonica 'Neon Flash', #3 container	15	EA	\$	\$
16-17	LITTLE DEVIL NINEBARK, Physocarpus opulifolius 'Little Devil', #5 container	4	EA	\$	\$
16-18	SEAGREEN JUNIPER, Juniperus chinensis 'Seagreen', #5 container	10	EA	\$	\$
16-19	BROADMOOR JUNIPER, Juniperus sabina 'Broadmoor', #5 container	46	EA	\$	\$
16-20	STELLA DE ORO DAYLILY, Hemerocallis 'Stella de Oro', #1 container	46	EA	\$	\$
16-21	PARDON ME DAYLILY, Hemerocallis 'Pardon Me', #1 container	27	EA	\$	\$
16-22	RED VOLUNTEER DAYLILY, Hemerocallis 'Red Volunteer', #1 container	14	EA	\$	\$
16-23	GOLDSTURM BLACK-EYED SUSAN, Rudbeckia fulgida 'Goldsturm'	28	EA	\$	\$
16-24	AUTUMN JOY SEDUM, Sedum telephium 'Autumn Joy'	28	EA	\$	\$
17-1	DRILLED PAVEMENT TIES	253	EA	\$	\$
17-2	DRILLED DOWEL BARS - 1-1/4" x 18"	48	EA	\$	\$
18-2	INLET PROTECTION TYPE B	1	EA	\$	\$
18-3	INLET PROTECTION TYPE C	11	EA	\$	\$
18-4	DUST CONTROL	2	EA	\$	\$
18-5	STREET SWEEPING	2	EA	\$	\$
22-1	NONMETALLIC CONDUIT, 1" (SCHEDULE 80)	584	LF	\$	\$
22-2	NONMETALLIC CONDUIT, 1-1/2" (SCHEDULE 80)	336	LF	\$	\$
22-3	NONMETALLIC CONDUIT, 2" - BORED	43	LF	\$	\$
22-5	PULL BOX, 24"X36"	2	EA	\$	\$
22-6	ELECTRICAL WIRE, NO. 6 (GROUND WIRE)	1139	LF	\$	\$
22-7	ELECTRICAL WIRE, NO. 4	3346	LF	\$	\$
22-8	CONCRETE BASE, TYPE 5 MODIFIED - BOLLARD	7	EA	\$	\$
22-9	INSTALL LIGHTED BOLLARD	7	EA	\$	\$
22-10	POWER PEDESTAL	12	EA	\$	\$
24-1	TRAFFIC CONTROL	1	LS	\$	\$
25-1	PUBLIC ART BASE	1	EA	\$	\$
25-2	TREE PIT PLANTER CURB	489	LF	\$	\$

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25-3 REMOVE AND SALVAGE EXISTING SIGNS	1	LS	\$	_____	\$	_____
25-4 SIGNS, HIPRR	37	SF	\$	_____	\$	_____
25-5 SIGNS, EG	3	SF	\$	_____	\$	_____
25-6 INSTALL SALVAGED POST	9	EA	\$	_____	\$	_____
25-7 INSTALL SALVAGED SIGN	19	EA	\$	_____	\$	_____
25-8 SIGN POSTS, U-CHANNEL, BLACK, 16-FOOT	3	EA	\$	_____	\$	_____
25-9 CORE DRILLING FOR SIGN POST	7	EA	\$	_____	\$	_____
25-10 SPECIAL TOP BRACKET FOR U-CHANNEL POST	1	EA	\$	_____	\$	_____
25-11 PAVEMENT MARKING 4-INCH WHITE EPOXY	414	LF	\$	_____	\$	_____
25-12 PAVEMENT MARKING 6-INCH WHITE EPOXY	82	LF	\$	_____	\$	_____
25-13 PAVEMENT MARKING 12-INCH WHITE EPOXY	16	LF	\$	_____	\$	_____
25-14 PAVEMENT MARKING CURB HEAD YELLOW EPOXY	48	LF	\$	_____	\$	_____

TOTAL AMOUNT OF BID PROPOSAL 'D' \$

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PROPOSAL - E

2nd Street (Central Avenue to Maple Avenue) – Proj. No. 312219, 312220, 352221 & 316774 – Plan No. 3601

Item No.	Item Description	Total Estimated	Unit	Unit Price	Total Amount
3-1	REMOVE CONCRETE PAVEMENT	1815	SY	\$	\$
3-2	REMOVE CURB & GUTTER	338	LF	\$	\$
3-3	REMOVE CONCRETE DRIVEWAYS AND SIDEWALK	603	SY	\$	\$
3-4	REMOVE ASPHALT SURFACE	1419	SY	\$	\$
3-5	SAW CONCRETE PAVEMENT - FULL DEPTH	222	LF	\$	\$
3-6	SAW CONCRETE DRIVEWAYS AND SIDEWALKS	222	LF	\$	\$
3-7	SAW ASPHALTIC SURFACE	142	LF	\$	\$
4-1	EXCAVATION	1133	CY	\$	\$
4-2	EXCAVATION BELOW SUBGRADE	10	CY	\$	\$
4-3	BORROW	10	CY	\$	\$
4-4	MANAGEMENT OF CONTAMINATED SOIL	110	TON	\$	\$
5-1	BASE AGGREGATE DENSE 1 1/4-INCH, IN-PLACE	18	CY	\$	\$
5-2	BASE AGGREGATE OPEN GRADED, IN-PLACE	331	CY	\$	\$
5-3	BREAKER-RUN STONE, IN-PLACE	711	CY	\$	\$
5-4	GEOTEXTILE FABRIC, TYPE SAS	1534	SY	\$	\$
6-1	STORM SEWER 12" RCP - CLASS III	45	LF	\$	\$
6-2	STORM SEWER 21" RCP - CLASS III	54	LF	\$	\$
6-3	STORM LATERAL 6" PVC	20	LF	\$	\$
6-4	STORM LATERAL 8" PVC	13	LF	\$	\$
6-5	STORM SEWER CAP 15" PVC	1	EA	\$	\$
6-6	STORM SEWER 6" SICPPP PIPE UNDERDRAIN - WRAPPED TRENCH	704	LF	\$	\$
7-1	CB TYPE 2	4	EA	\$	\$
8-1	CB COVER - TYPE E	2	EA	\$	\$

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8-2	CB COVER - TYPE H	2	EA	\$		\$
8-3	MH COVER - TYPE J	2	EA	\$		\$
8-4	MH COVER - TYPE JM	1	EA	\$		\$
9-1	ADJUST MH - STM	1	EA	\$		\$
9-2	RECONSTRUCT CB - STM (#8)	1	LS	\$		\$
10-1	REMOVE CONCRETE BASE - SIGNAL / LIGHT	5	EA	\$		\$
10-2	ABANDON VAULT	137	SF	\$		\$
10-3	REMOVE FOUNDATION WALL	172	SF	\$		\$
10-4	REMOVE MH - STM	1	EA	\$		\$
10-5	REMOVE CATCH BASIN & CONNECTING PIPES	4	EA	\$		\$
10-6	REMOVE STORM SEWER - 10" TO 18"	288	LF	\$		\$
10-7	REMOVE LATERAL - STORM	77	LF	\$		\$
10-8	REMOVE LATERAL - SANITARY	120	LF	\$		\$
10-9	BULKHEAD STORM SEWER	1	EA	\$		\$
11-1	CONCRETE PAVEMENT - 8" (DOWELED)	1252	SY	\$		\$
11-2	COLORED CONCRETE CROSSWALKS, 8" (DOWELED)	36	SY	\$		\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	843	LF	\$		\$
13-2	CONCRETE CURB & GUTTER - 30" TYPE D	47	LF	\$		\$
13-3	CONCRETE PEDESTRIAN CURB	20	LF	\$		\$
13-4	CONCRETE PEDESTRIAN CURB & GUTTER	20	LF	\$		\$
15-1	CONCRETE SIDEWALK - 5"	2423	SF	\$		\$
15-2	CONCRETE SIDEWALK - 6", REINFORCED	1338	SF	\$		\$
15-3	CONCRETE SIDEWALK - 8", REINFORCED	756	SF	\$		\$
15-4	COLORED CONCRETE SIDEWALK - 5"	1400	SF	\$		\$
15-5	COLORED CONCRETE SIDEWALK - 8", REINFORCED	367	SF	\$		\$
15-6	INSTALL CURB RAMP DETECTABLE WARNING FIELD (4-FT WIDE)	56	SF	\$		\$
15-7	SEAL EXPANSION JOINT	350	LF	\$		\$
16-1	FINISHED TERRACES - CITY SEED MIX 2016	18	SY	\$		\$
16-2	PERMEABLE PAVERS OVER CONCRETE	803	SF	\$		\$

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16-3	PLANTING SOIL	98	CY	\$		\$
16-4	HARDWOOD MULCH	146	SY	\$		\$
16-5	RED OAK, Quercus rubra, 4" B & B	1	EA	\$		\$
16-6	AUTUMN GOLD' GINGKO, Gingko biloba 'Autumn Gold', 4" B & B	1	EA	\$		\$
16-7	SKYLINE 'HONEY LOCUST', Gleditsia triancathos 'Skyline', 5" B & B	2	EA	\$		\$
16-8	PRAIRIEFIRE CRABAPPLE, Malus 'Prairiefire', 2.5" B & B	4	EA	\$		\$
16-9	AUTUMN BRILLIANCE SERVICEBERRY, Amelanchier grand 'Autumn Brilliance', 8' B & B, multi stem	3	EA	\$		\$
16-10	BLACK CHOKECHERRY, Aronia melanocarpa var. elata, #5 container	9	EA	\$		\$
16-11	NEON FLASH SPIREA, Spirea japonica 'Neon Flash', #3 container	12	EA	\$		\$
16-12	LITTLE DEVIL NINEBARK, Physocarpus opulifolius 'Little Devil', #5 container	32	EA	\$		\$
16-13	SEAGREEN JUNIPER, Juniperus chinensis 'Seagreen', #5 container	21	EA	\$		\$
16-14	BROADMOOR JUNIPER, Juniperus sabina 'Broadmoor', #5 container	25	EA	\$		\$
16-15	STELLA DE ORO DAYLILY, Hemerocallis 'Stella de Oro', #1 container	36	EA	\$		\$
16-16	PARDON ME DAYLILY, Hemerocallis 'Pardon Me', #1 container	30	EA	\$		\$
16-17	RED VOLUNTEER DAYLILY, Hemerocallis 'Red Volunteer', #1 container	4	EA	\$		\$
16-18	GOLDSTURM BLACK-EYED SUSAN, Rudbeckia fulgida 'Goldsturm'	22	EA	\$		\$
16-19	AUTUMN JOY SEDUM, Sedum telephium 'Autumn Joy'	20	EA	\$		\$
17-1	DRILLED PAVEMENT TIES	70	EA	\$		\$
17-2	DRILLED DOWEL BARS - 1 1/4" x 18"	12	EA	\$		\$
18-2	INLET PROTECTION TYPE B	1	EA	\$		\$
18-3	INLET PROTECTION TYPE C	6	EA	\$		\$
18-4	DUST CONTROL	2	EA	\$		\$
18-5	STREET SWEEPING	2	EA	\$		\$
19-1	WATER MAIN, 8" D.I.	323	LF	\$		\$
19-2	WATER MAIN, 6" D.I.	3	LF	\$		\$
19-3	WATER MAIN, 4" D.I.	3	LF	\$		\$
19-4	FLUOROCARBON GASKETS, 8"	4	EA	\$		\$
19-5	VALVE W/VALVE BOX, 8"	2	EA	\$		\$
19-6	VALVE W/VALVE BOX, 6"	1	EA	\$		\$

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19-7	TEE, 8" X 8"	1	EA	\$		\$
19-8	TEE, 8" X 6"	1	EA	\$		\$
19-9	REDUCER, 8" X 4"	1	EA	\$		\$
19-10	45 D BEND, 8"	4	EA	\$		\$
19-11	SLEEVE, 8"	2	EA	\$		\$
19-12	SLEEVE, 6"	1	EA	\$		\$
19-13	SLEEVE, 4"	1	EA	\$		\$
19-14	WATER MAIN 8" D.I. - VERTICAL OFFSET	1	EA	\$		\$
19-15	CONNECT TO EXISTING WATER MAIN	4	EA	\$		\$
19-16	CORPORATION STOP, 1"	1	EA	\$		\$
19-17	CORPORATION STOP, 1 1/2"	1	EA	\$		\$
19-18	CURB STOP W/BOX, 1"	1	EA	\$		\$
19-19	CURB STOP W/BOX, 1 1/2"	1	EA	\$		\$
19-20	WATER SERVICE, 1" COPPER	40	LF	\$		\$
19-21	WATER SERVICE, 1 1/2" COPPER	20	LF	\$		\$
19-22	FROST SLEEVE	2	EA	\$		\$
19-23	TEMPORARY WATER	1	LS	\$		\$
19-24	INSTALL TRENCH PLUGS	2	EA	\$		\$
20-1	SANITARY SEWER - 8" PVC	228	LF	\$		\$
20-2	SANITARY SEWER LATERAL - 6" PVC	60	LF	\$		\$
20-3	8" x 6" PVC WYE	2	EA	\$		\$
20-4	MH TYPE 1 SAN	11.1	VF	\$		\$
20-5	CONNECT TO EXISTING SAN SEWER - 8" PVC	1	EA	\$		\$
22-1	NONMETALLIC CONDUIT, 1"	430	LF	\$		\$
22-2	NONMETALLIC CONDUIT, 1-1/2"	316	LF	\$		\$
22-3	NONMETALLIC CONDUIT, 2"	276	LF	\$		\$
22-5	PULL BOX, 24"X36"	2	EA	\$		\$
22-6	ELECTRICAL WIRE, NO. 12 (POLE WIRE)	384	LF	\$		\$
22-7	ELECTRICAL WIRE, NO. 6 (GROUND WIRE)	1098	LF	\$		\$

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22-8	ELECTRICAL WIRE, NO. 4	3268	LF	\$		\$
22-9	CONCRETE BASE, TYPE 5 MODIFIED - BOLLARD	6	EA	\$		\$
22-10	CONCRETE BASE, TYPE 5 MODIFIED - 24" - B	2	EA	\$		\$
22-12	INSTALL STREET LIGHT/POLES	2	EA	\$		\$
22-13	INSTALL LIGHTED BOLLARD	6	EA	\$		\$
22-14	POWER PEDESTAL	11	EA	\$		\$
24-1	TRAFFIC CONTROL	1	LS	\$		\$
25-1	PUBLIC ART BASE	1	EA	\$		\$
25-2	TREE PIT PLANTER CURB	579	LF	\$		\$
25-3	REMOVE AND SALVAGE EXISTING SIGNS	1	LS	\$		\$
25-4	SIGNS, HIPRR	58	SF	\$		\$
25-5	SIGNS, EG	2	SF	\$		\$
25-6	INSTALL SALVAGED POST	5	EA	\$		\$
25-7	INSTALL SALVAGED SIGN	3	EA	\$		\$
25-8	SIGN POSTS, U-CHANNEL, BLACK, 12-FOOT	1	EA	\$		\$
25-9	SIGN POSTS, U-CHANNEL, BLACK, 16-FOOT	3	EA	\$		\$
25-10	CORE DRILLING FOR SIGN POST	6	EA	\$		\$
25-11	SPECIAL TOP BRACKET FOR U-CHANNEL POST	1	EA	\$		\$
25-12	PAVEMENT MARKING 4-INCH WHITE EPOXY	328	LF	\$		\$
25-13	PAVEMENT MARKING 6-INCH WHITE EPOXY	83	LF	\$		\$
25-14	PAVEMENT MARKING 12-INCH WHITE EPOXY	16	LF	\$		\$
25-14	PAVEMENT MARKING CURB HEAD YELLOW EPOXY	9	LF	\$		\$

TOTAL AMOUNT OF BID PROPOSAL 'E' \$

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PROPOSAL - F

Colored Concrete Maintenance and Repairs - Central Avenue (17th Street to 2nd Street) - Chestnut Avenue (7th Street to 1st Street) - Project No. 312219

Item No.	Item Description	Total Estimated	Unit	Unit Price	Total Amount
3-1	REMOVE CONCRETE PAVEMENT	30	SY	\$	\$
3-2	REMOVE CONCRETE CURB & GUTTER	25	LF	\$	\$
3-3	SAW CONCRETE PAVEMENT - FULL DEPTH	150	LF	\$	\$
11-1	COLORED CONCRETE CROSSWALK PAVEMENT, 9-INCH	30	SY	\$	\$
13-1	CONCRETE CURB & GUTTER - 30" TYPE A	25	LF	\$	\$
17-1	RE-SEAL EXISTING COLORED CONCRETE SURFACE	5531	SY	\$	\$
17-2	CLEAN, TREAT & RE-SEAL EXISTING CONCRETE PAVEMENT JOINTS	6330	LF	\$	\$
17-3	EXISTING COLORED CONCRETE PARTIAL DEPTH REPAIR	381	SF	\$	\$
17-4	DRILLED PAVEMENT TIES	25	EA	\$	\$
17-5	DRILLED DOWEL BARS	40	EA	\$	\$
24-1	TRAFFIC CONTROL	1	LS	\$	\$

TOTAL AMOUNT OF BID PROPOSAL 'F' \$

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SUMMARY OF ALL PROPOSALS

TOTAL AMOUNT OF BID PROPOSAL 'A' \$

TOTAL AMOUNT OF BID PROPOSAL 'B' \$

TOTAL AMOUNT OF BID PROPOSAL 'C' \$

TOTAL AMOUNT OF BID PROPOSAL 'D' \$

TOTAL AMOUNT OF BID PROPOSAL 'E' \$

TOTAL AMOUNT OF BID PROPOSAL 'F' \$

TOTAL OF ALL PROPOSALS \$

CONTRACTOR

DATE: _____

WE _____ (Name of Bidder) have examined the

Bidding Documents and the following Addenda (receipt of which is hereby acknowledged)

ADDENDUM NO.

DATE

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I hereby certify that all the statements herein are made on behalf of

(Name of Corporation, Partnership, or Person Submitting Bid)

a Corporation organized and existing under the laws of the State of _____;

a Partnership consisting of _____;

an Individual trading as _____;

of the City of _____ State of _____;

that I have examined and carefully prepared this Proposal from the Plans and Specifications and have checked the same in detail before submitting this Proposal; that I have full authority to make such statements and submit this Proposal in its (their) behalf; and that the statements are true and correct.

Signature

Subscribed and sworn before me this _____ day of _____, 2016

Notary Public

My Commission Expires: _____

Bidders should not add any conditions or qualifying statements to this Proposal, as otherwise the Proposal may be declared irregular as not being responsive to the advertisement.

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ATTACH

PROPOSAL

GUARANTEE

HERE

PROPOSAL GUARANTEE

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**FULL AND COMPLETE LIST
OF
SUBCONTRACTORS AND EQUIPMENT SUPPLIERS
TO BE USED FOR THIS PROJECT.**

NOTE: This list cannot be altered after submission without written consent of the OWNER.

Pursuant to Section 66.0901(7), Wisconsin Statutes, the Bidder, as part of this Proposal, submits this full and complete list of all the Subcontractors and the class or work to be performed by each, including equipment suppliers to be used for this project.

The Contractor will be permitted to sublet a portion of the Contract, but shall perform with his own organization work amounting to at least 30 percent of the original contract amount.

If the Contractor shall sublet any part of this Contract, the Contractor shall be as fully responsible to the owner for the acts and omissions of his Subcontractor and of the persons either directly or indirectly employed by his Subcontractor as he is by acts or omissions of persons directly employed by himself. All Subcontractors, if any, shall be listed in the spaces provided on the Proposal Form and said list shall not be added to or altered without the written consent of the Owner.

When a Subcontractor and the class of work to be performed is not listed, it shall be considered that the Bidder will perform the work himself.

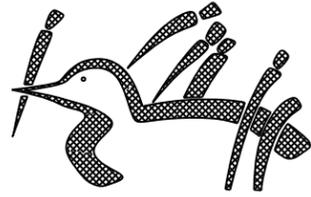
Subcontractor's Name, Address, and Phone Number Work to be Performed

Supplier's Name, Address, and Phone Number Equipment to be Supplied

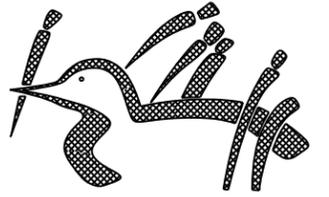
I hereby certify that the use of the name(s) of the above Subcontractor(s) was with the knowledge and consent of the said Subcontractor(s).

Signature of Bidder

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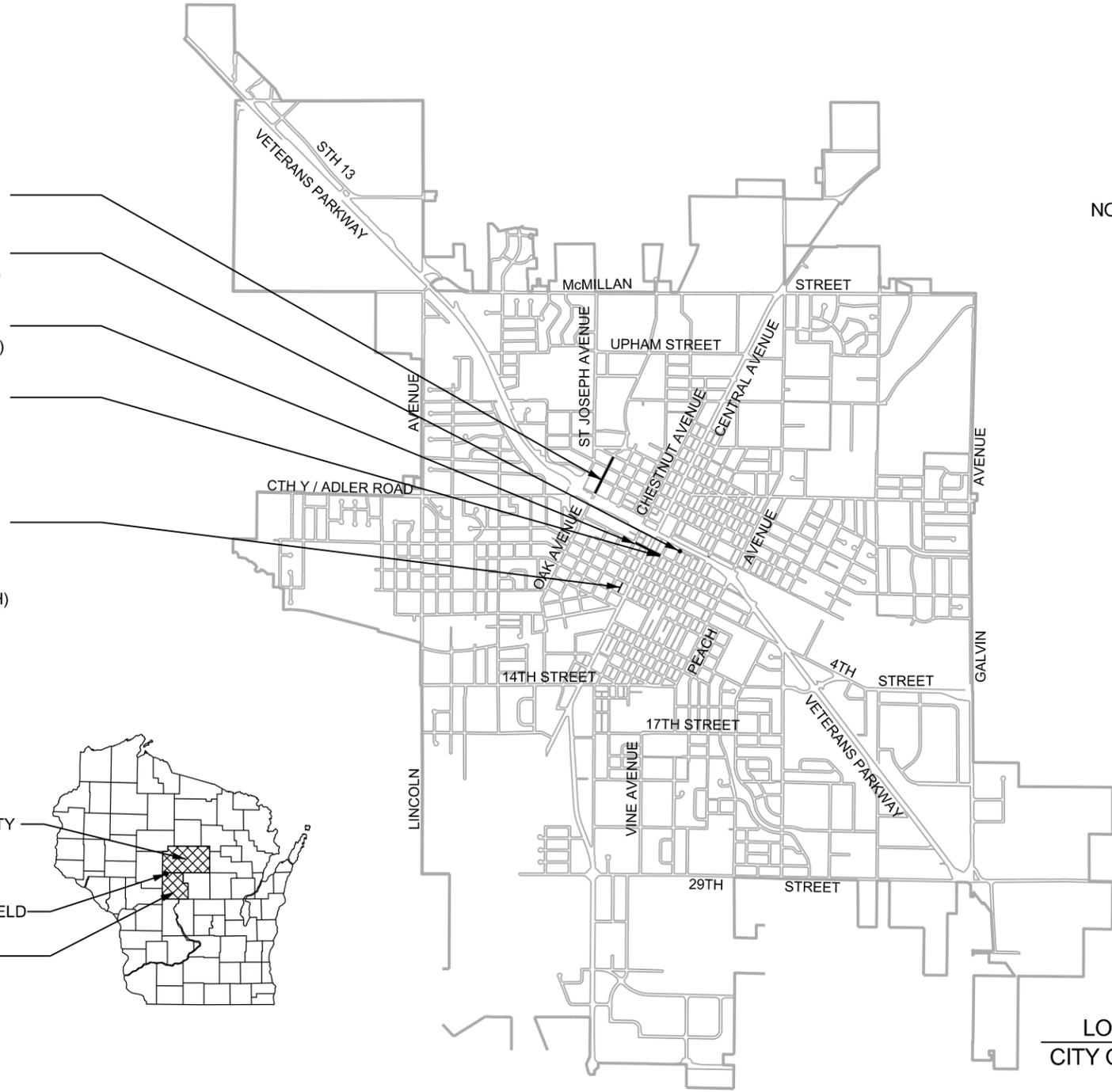


CITY OF MARSHFIELD CONTRACT 2016-01



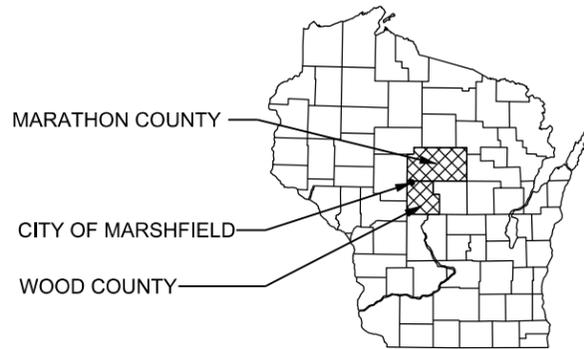
NOT TO SCALE

PLAN NO. 3590 PROJECT NO. - 612865	SIDEWALK RECONSTRUCTION OAK AVENUE (DEPOT STREET TO CLEVELAND STREET)
PLAN NO. 3599 PROJECT NO. 312238 - STREET	STREET RECONSTRUCTION STREET (1ST STREET & CEDAR AVENUE INTERSECTION)
PLAN NO. 3600 PROJECT NO. 312219 - STREET	STREET RECONSTRUCTION 2ND STREET (CHESTNUT AVENUE TO CENTRAL AVENUE)
PLAN NO. 3601 PROJECT NO. 312219 - STREET 352221 - SANITARY 312220 - WATER SERVICES 316774 - STORM SEWER W/ PAVING	STREET RECONSTRUCTION 2ND STREET (CENTRAL AVENUE TO MAPLE AVENUE)
PLAN NO. 3598 PROJECT NO. - 312017	STREET RECONSTRUCTION ALLEY (CHESTNUT/CENTRAL, 5TH/6TH)
PLAN NO. 3610 PROJECT NO. - 312219	COLORED CONCRETE MAINTENANCE & REPAIRS CHESTNUT AVE. (1ST - 7TH) & CENTRAL AVE. (2ND - 17TH)



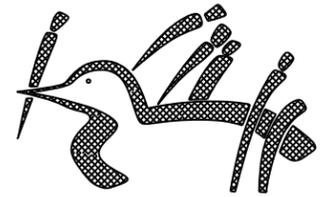
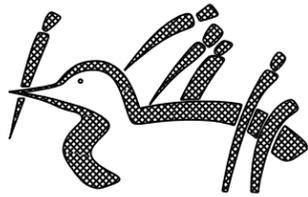
INDEX OF SHEETS

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	LEGEND AND GENERAL NOTES
SHEET NO. 3-4	TYPICAL SECTIONS
SHEET NO. 5 - 33	CONSTRUCTION DETAILS
SHEET NO. 34 - 35	MQ - MISCELLANEOUS QUANTITIES
SHEET NO. 36 - 39	EW - EARTHWORK QUANTITIES
SHEET NO. 40 - 45	COLORED CONCRETE MAINTENANCE & REPAIRS
SHEET NO. 46 - 56	SIDEWALK RECONSTRUCTION (OAK AVENUE)
SHEET NO. 57 - 60	STREET RECONSTRUCTION (ALLEY)
SHEET NO. 61 - 64	STREET RECONSTRUCTION (1ST /CEDAR)
SHEET NO. 65 - 85	STREET RECONSTRUCTION (2ND STREET)



LOCATION MAP
CITY OF MARSHFIELD

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LEGEND

	EXIST. CONC. SIDEWALK OR DRIVE
	REMOVE AND REPLACE SIDEWALK
	PROPOSED SIDEWALK CONSTRUCTION
	FUTURE SIDEWALK CONSTRUCTION
	EXISTING CB OR INLET
	NEW CB OR INLET
	EXISTING CURB & GUTTER
	NEW CURB & GUTTER
	CONC. SDWK, DRWY, PAVT. REMOVAL
	CONSTRUCT OR REPLACE ASPHALTIC SURFACE
	CONSTRUCT OR REPLACE GRAVEL SURFACE
	CONST. CONC. DRIVEWAY
	BENCHMARK
	GAS VALVE
	WATER VALVE
	CURB STOP
	POWER POLE
	TELEPHONE POLE
	LIGHT POLE
	HYDRANT
	POLE GUY LINE
	NEW YARD INLET
	EXISTING M.H.
	BULKHEAD
	NEW M.H.
	TREE
	REMOVE TREE
	BUSH
	JOINT SPACING AT INTERSECTION
	EXISTING SAN SEWER
	PROPOSED SAN SEWER
	TEL. PEDESTAL
	UNDERGROUND TEL. CABLE
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	PROPOSED UNDERDRAIN
	EXISTING WATER MAIN
	PROPOSED WATER MAIN
	EXISTING GAS MAIN
	UNDERGROUND ELECTRIC CABLE
	UNDERGROUND CABLE TV
	COMBUSTIBLE FLUIDS (UNDER PRESSURE)
	DOWEL BASKETS
	STORM SEWER LABELS
	SANITARY SEWER LABELS
	WATER MAIN LABELS
	REMOVAL LABELS
	EROSION CONTROL INLET PROTECTION
	EROSION CONTROL DITCH CHECK
	EROSION CONTROL CULVERT PIPE DITCH CHECK

OFFICE CONTACTS

DAN KNOECK, P.E. - DIRECTOR OF PUBLIC WORKS
 TOM TURCHI, P.E. - CITY ENGINEER
 TIM CASSIDY, P.E. - ASSISTANT CITY ENGINEER
 JOSH MAURITZ, P.E. - CIVIL ENGINEER II
 NATE ULNESS, E.I.T. - CIVIL ENGINEER I
 LANCE OLDHAM - ENGINEERING TECHNICIAN
 SHAWN MILLER - ENGINEERING TECHNICIAN

CITY OF MARSHFIELD
 630 S. CENTRAL AVE.
 P. O. BOX 727
 MARSHFIELD, WI 54449-0727
 (715) 486-2034
 FAX (715) 384-7631

GENERAL NOTES

ALL NEW DRIVEWAY ENTRANCES ARE TO BE CONSTRUCTED OF CONCRETE BETWEEN THE CURB AND SIDEWALK.

ALL INTERSECTION RADII ARE 20' TO FACE OF CURB UNLESS OTHERWISE NOTED.

ALL PROPERTY MARKERS AND BLOCK CORNERS SHALL BE PRESERVED.

THE EXACT LOCATION OF THE DRIVEWAY ENTRANCES TO BE DETERMINED IN THE FIELD BY THE ENGINEER. REPLACE ALL DRIVEWAYS IN KIND.

ALL CULVERTS IN EXISTING DRIVEWAYS SHALL BE CAREFULLY REMOVED TO AVOID DAMAGE AND SHALL BE PLACED ON THE TERRACE OF THE OWNER FOR DISPOSAL BY THE OWNER. IF, AFTER 10 DAYS NOTICE BY THE ENGINEER, THE OWNER DOES NOT CLAIM SUCH SALVAGED MATERIALS, THEY SHALL BE DISPOSED OF BY THE CONTRACTOR

TRANSVERSE JOINTS SHOWN ON THE PLANS MAY BE REVISED WITH APPROVAL BY THE ENGINEER.

LOCATION OF CURB RAMPS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

NO TREES ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

EBS IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ABBREVIATIONS

AH	AHEAD
ASPH	ASPHALTIC
BK	BACK
BM	BENCHMARK
C&G	CURB & GUTTER
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CP	CULVERT PIPE
CPDC	CULVERT PIPE DITCH CHECK
CSCP	CORRUGATED STEEL CULVERT PIPE
CY	CUBIC YARD
D	DEGREE OF CURVE / DEPTH
Δ	CENTRAL ANGLE OR DELTA
DIA	DIAMETER
DISCH	DISCHARGE
E	EAST
EBS	EXCAVATION BELOW SUBGRADE
ELEV	ELEVATION
EXIST	EXISTING
GV	GAS VALVE
HYD	HYDRANT
LF	LINEAL FOOT
MH	MANHOLE
N	NORTH
NO	NUMBER
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENCY
PU	PIPE UNDERDRAIN
PUU	PIPE UNDERDRAIN, UNPERFORATED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS / RANGE
R/W	RIGHT OF WAY
RCCP	REINFORCED CONCRETE CULVERT PIPE
RCCPP	REINFORCED CONCRETE CULVERT PIPE - PERFORATED
RCHPEP	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE
RCP	REINFORCED CONCRETE PIPE
RCPSS	REINFORCED CONCRETE PIPE STORM SEWER
REQD	REQUIRED
RL	REFERENCE LINE
RR	RAILROAD
RT	RIGHT
S	SOUTH
SAN	SANITARY SEWER
SDG	SPECIAL DITCH GRADE
SF	SQUARE FOOT
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE
SICPPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE - PERFORATED
SPECS	SPECIFICATIONS
SS	STORM SEWER
STA	STATION
STH	STATE TRUNK HIGHWAY
SWG	SPECIAL WALK GRADE
SY	SQUARE YARD
T	TOWN
TAN	TANGENT
TC	TOP OF CURB
TEL	TELEPHONE
TSE	TOP OF STRUCTURE ELEVATION
ULO	UTILITY LINE OPENING
VC	VERTICAL CURVE
VF	VERTICAL FOOT
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
WV	WATER VALVE

UTILITIES

CITY OF MARSHFIELD - STREET DIVISION
 407 W 2ND ST
 MARSHFIELD WI 54449
 ATTN: MIKE WINCH
 (715) 384-3606

CITY OF MARSHFIELD - WASTEWATER UTILITY
 3411 S GALVIN AVE
 MARSHFIELD WI 54449
 ATTN: SAM WARP
 (715) 591-2022

MARSHFIELD UTILITIES
 2000 S RODDIS AVE
 PO BOX 670
 MARSHFIELD WI 54449-0670
 ATTN: DAVID WASSERBURGER (WATER)
 ATTN: NICHOLAS KUMM (ELECTRIC)
 (715) 387-1195
 CONSTRUCTION CONTACTS
 (WATER) JOHN RICHMOND
 CELL: (715) 937-8302
 (ELECTRIC) DERREK CAFLISCH
 CELL: (715) 507-0077

CHARTER COMMUNICATIONS
 508 N CENTRAL AVE #103
 MARSHFIELD WI 54449
 ATTN: JESSE GRUNY
 (715) 748-5071-OFFICE
 (715) 651-5605-CELL

FRONTIER COMMUNICATIONS
 521 4TH ST
 WAUSAU WI 54403-4869
 ATTN: BRADLEY KSIONEK
 (715) 847-1550

WE ENERGIES
 1921 8TH ST SOUTH
 PO BOX 789
 WISCONSIN RAPIDS WI 54494-0789
 ATTN: CRAIG R. KNAUF, P.E.
 (715) 421-7267-OFFICE
 (715) 213-1954-CELL
 (800) 261-5325 - GAS LEAK / EMERGENCY

AGENCIES

EMERGENCY - FIRE, RESCUE, AMBULANCE, POLICE
 DIAL 911

MARSHFIELD FIRE DEPARTMENT
 412 E 4TH ST
 MARSHFIELD WI 54449
 (715) 384-3118 NON-EMERGENCY

MARSHFIELD POLICE DEPARTMENT
 110 W 1ST ST
 MARSHFIELD WI 54449
 (715) 384-3113 NON-EMERGENCY

ADVANCED DISPOSAL SERVICES
 501 S HUME AVE
 MARSHFIELD WI 54449
 (715) 387-6275

UNITED STATES POST OFFICE
 202 S CHESTNUT AVE
 MARSHFIELD WI 54449
 (715) 384-2198

WOOD COUNTY - HIGHWAY DEPARTMENT
 555 17TH AVE N
 WISCONSIN RAPIDS WI 54495
 (715) 421-8875

WOOD COUNTY - SHERIFF'S DEPARTMENT
 630 S CENTRAL AVE
 MARSHFIELD WI 54449
 (715) 384-5345 NON-EMERGENCY

WASTE MANAGEMENT
 (888) 960-0008

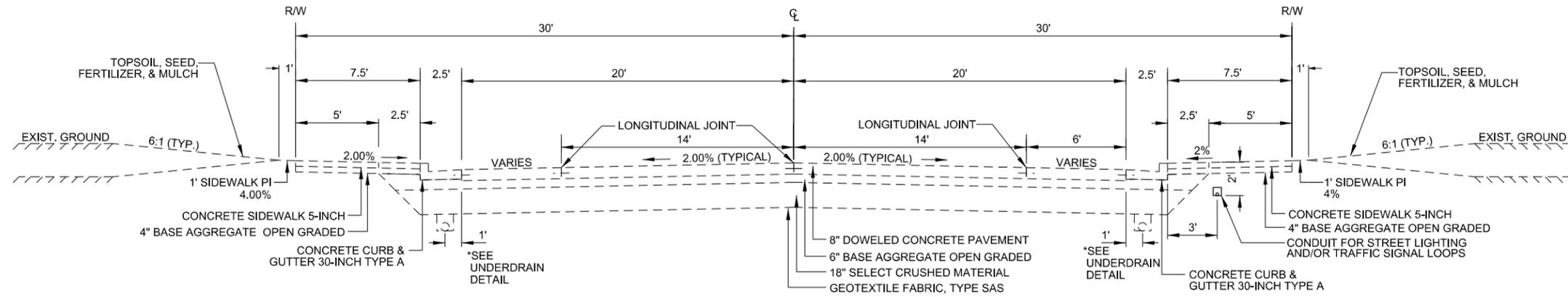
TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN



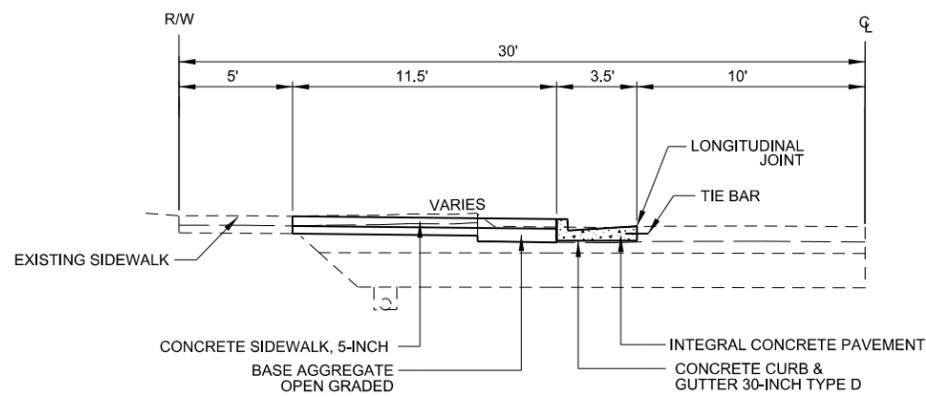
Toll Free (800) 242-8511
 Milwaukee Area (414) 259-1181
 Hearing Impaired TDD (800) 542-2289
 www.DiggersHotline.com

WISCONSIN STATUTE 182.0175 (1974)
 REQUIRES MINIMUM OF 3 WORK DAYS
 NOTICE BEFORE YOU EXCAVATE.

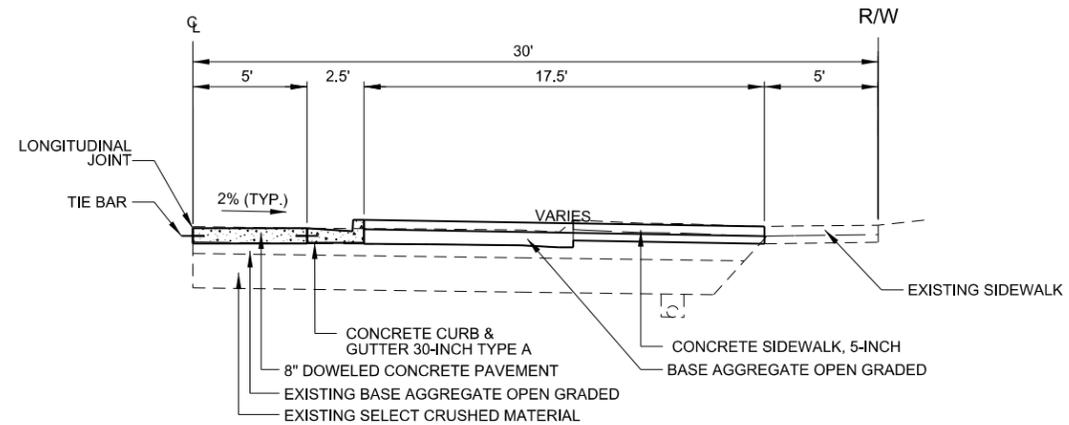
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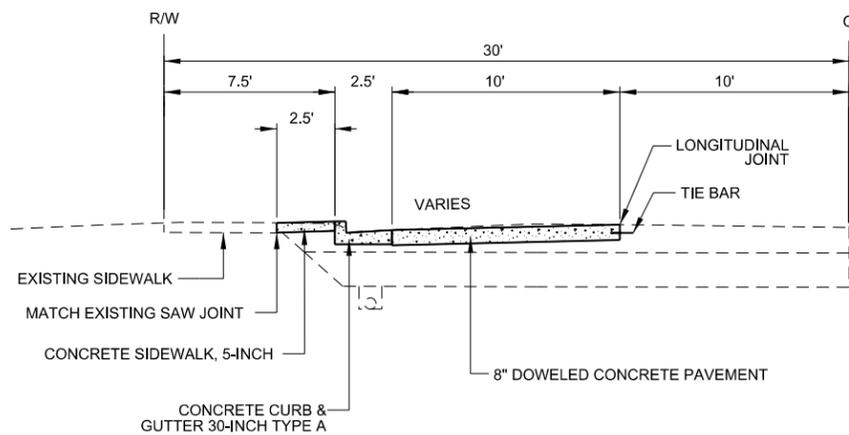
EXISTING TYPICAL SECTION
WEST 2ND STREET
CHESTNUT TO CENTRAL



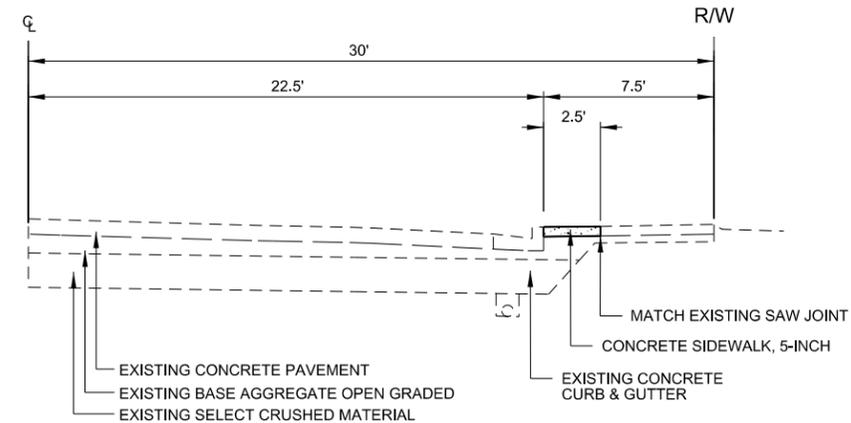
TYPICAL SECTION
WEST 2ND STREET
CHESTNUT TO CENTRAL
STA 20+08 - 21+45, LT
STA 22+61 - 23+44, LT



TYPICAL SECTION
WEST 2ND STREET
CHESTNUT TO CENTRAL
STA 20+08 - 20+25, RT
STA 23+35 - 23+54, RT



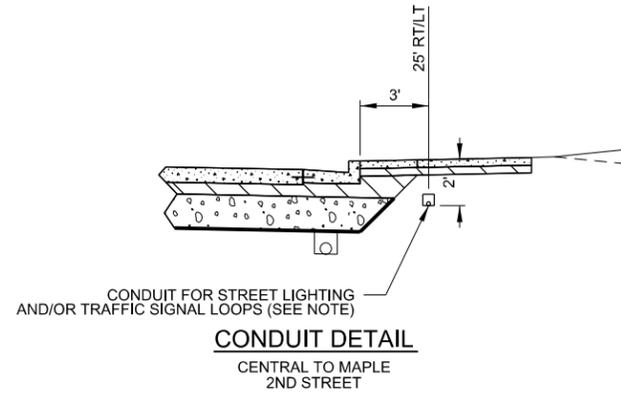
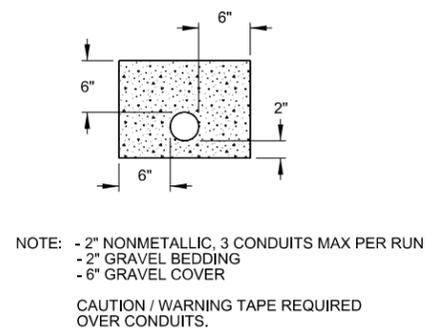
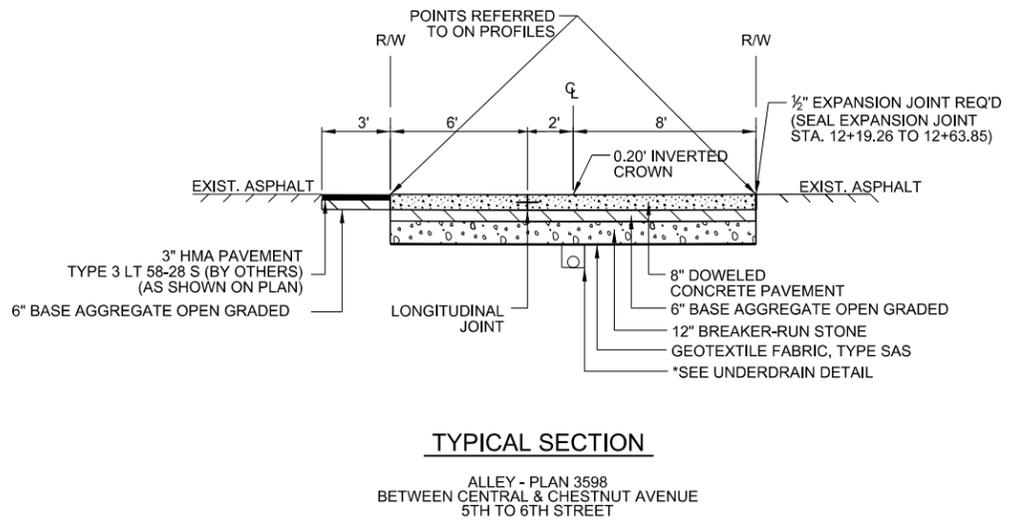
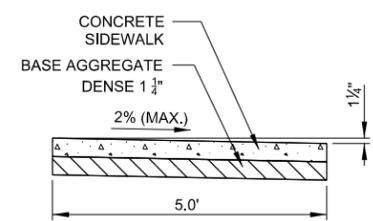
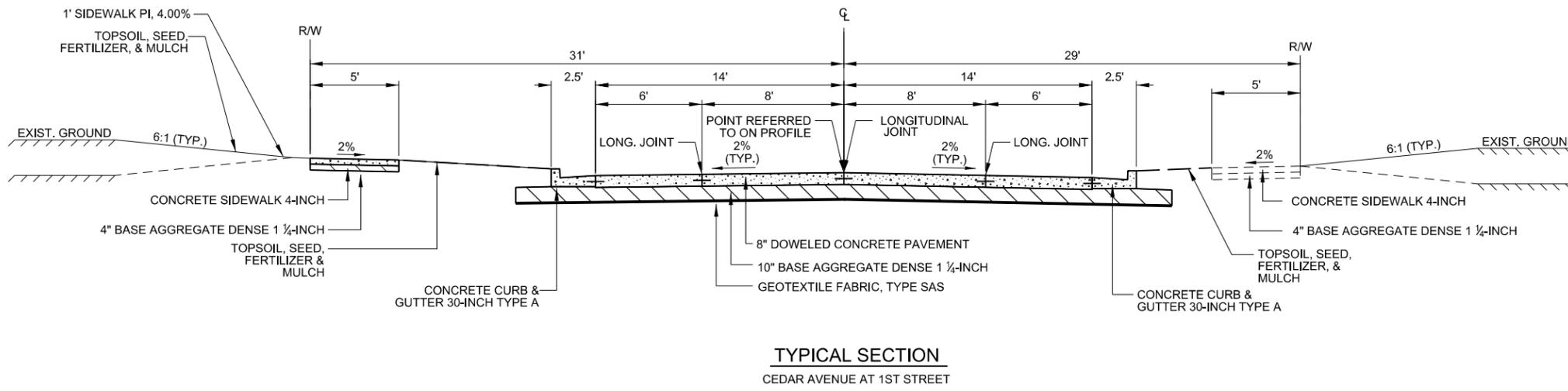
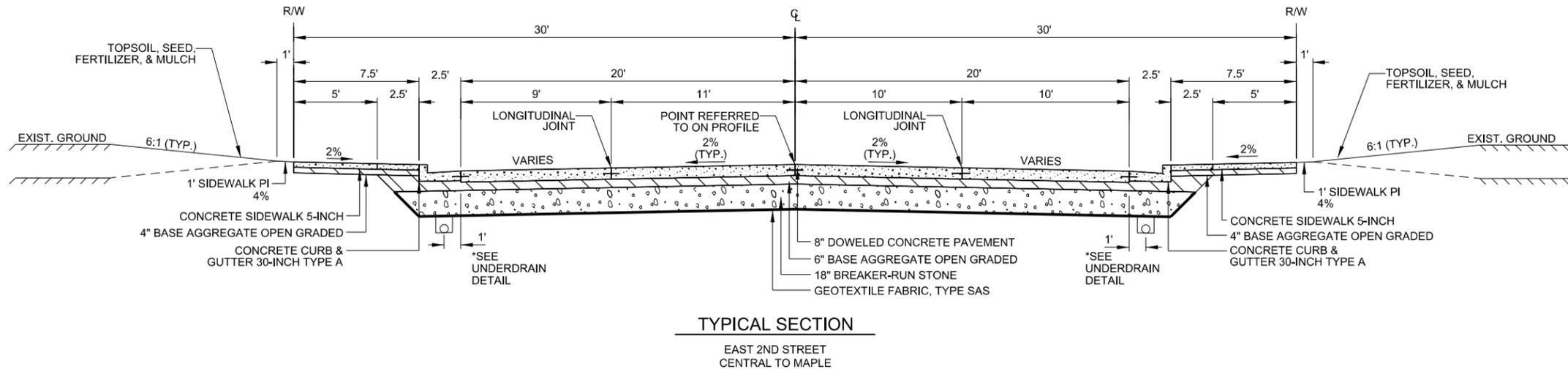
TYPICAL SECTION
WEST 2ND STREET
CHESTNUT TO CENTRAL
STA 21+71 - 22+36, LT



TYPICAL SECTION
WEST 2ND STREET
CHESTNUT TO CENTRAL
STA 20+68 - 23+02, RT

PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION CITY OF MARSHFIELD, WISCONSIN
TYPICAL SECTIONS

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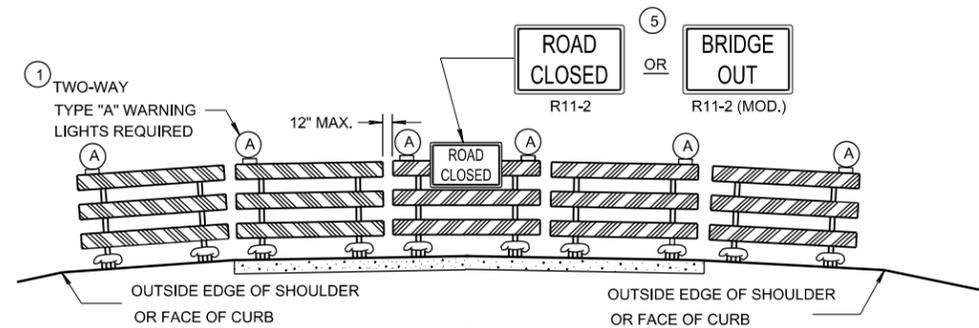


PROJ. NO. _____

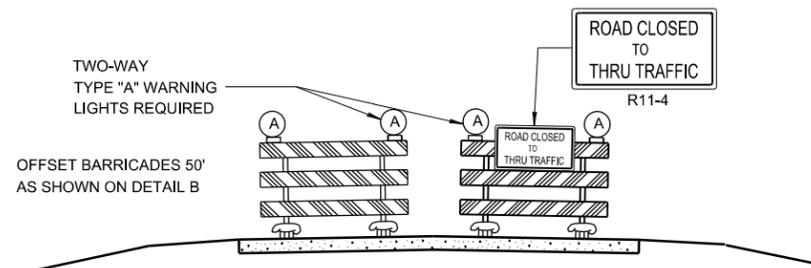
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

TYPICAL SECTIONS

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DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR EAST
- COUNTY XX
- M1-4
- M1-5A
- M1-6
- M05-1
- M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

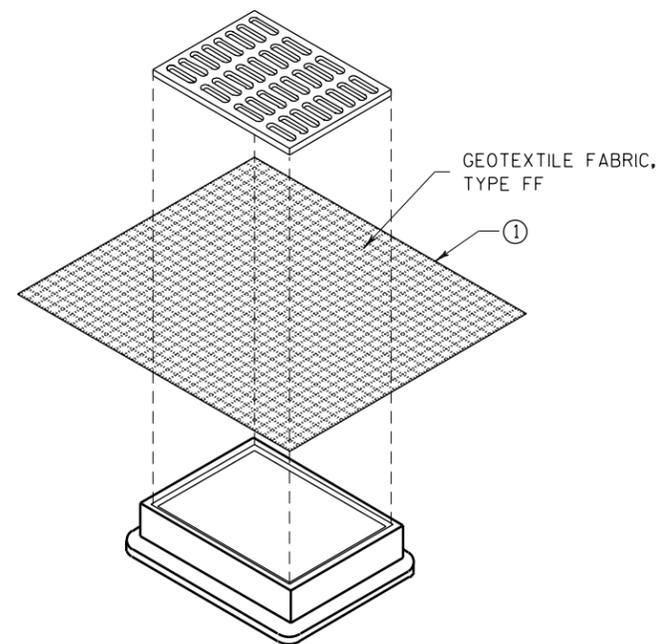
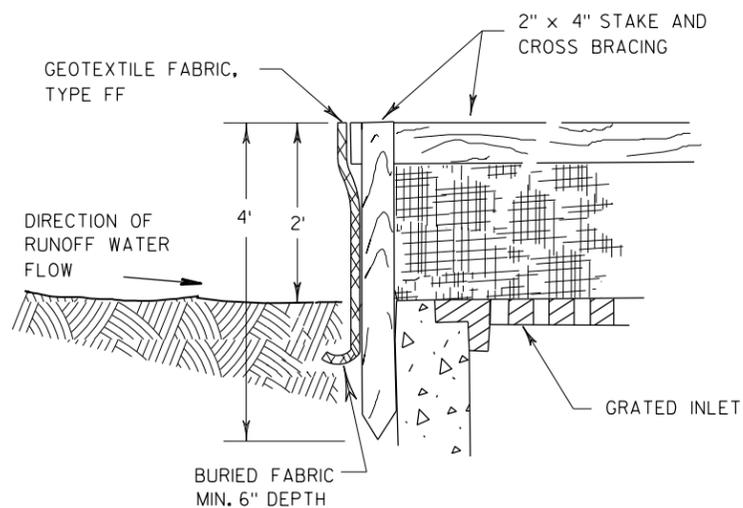
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

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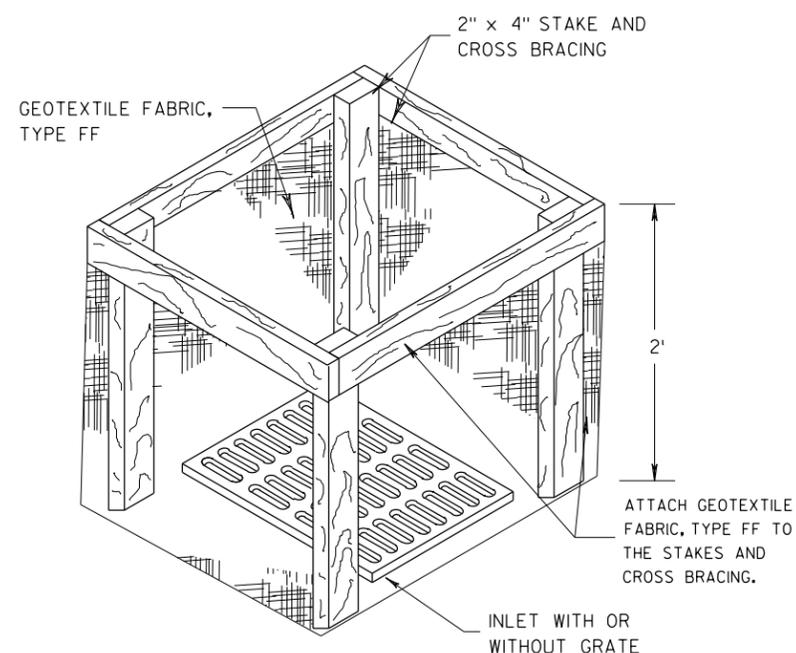
PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES DETAIL
(WISDOT SDD 15C 2-6B)



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE A

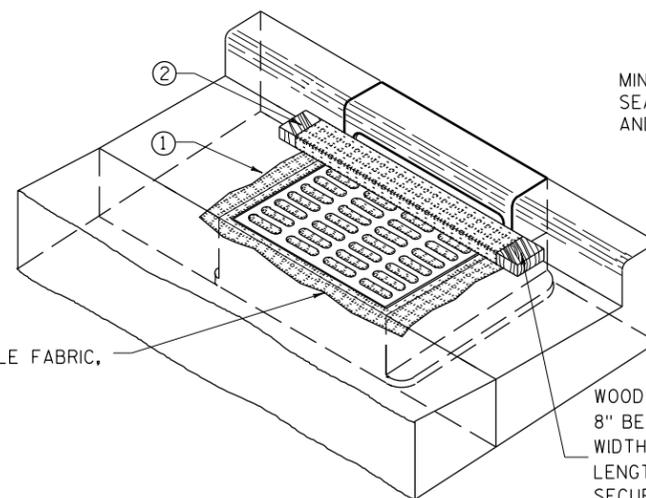
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



INLET PROTECTION, TYPE C (WITH CURB BOX)

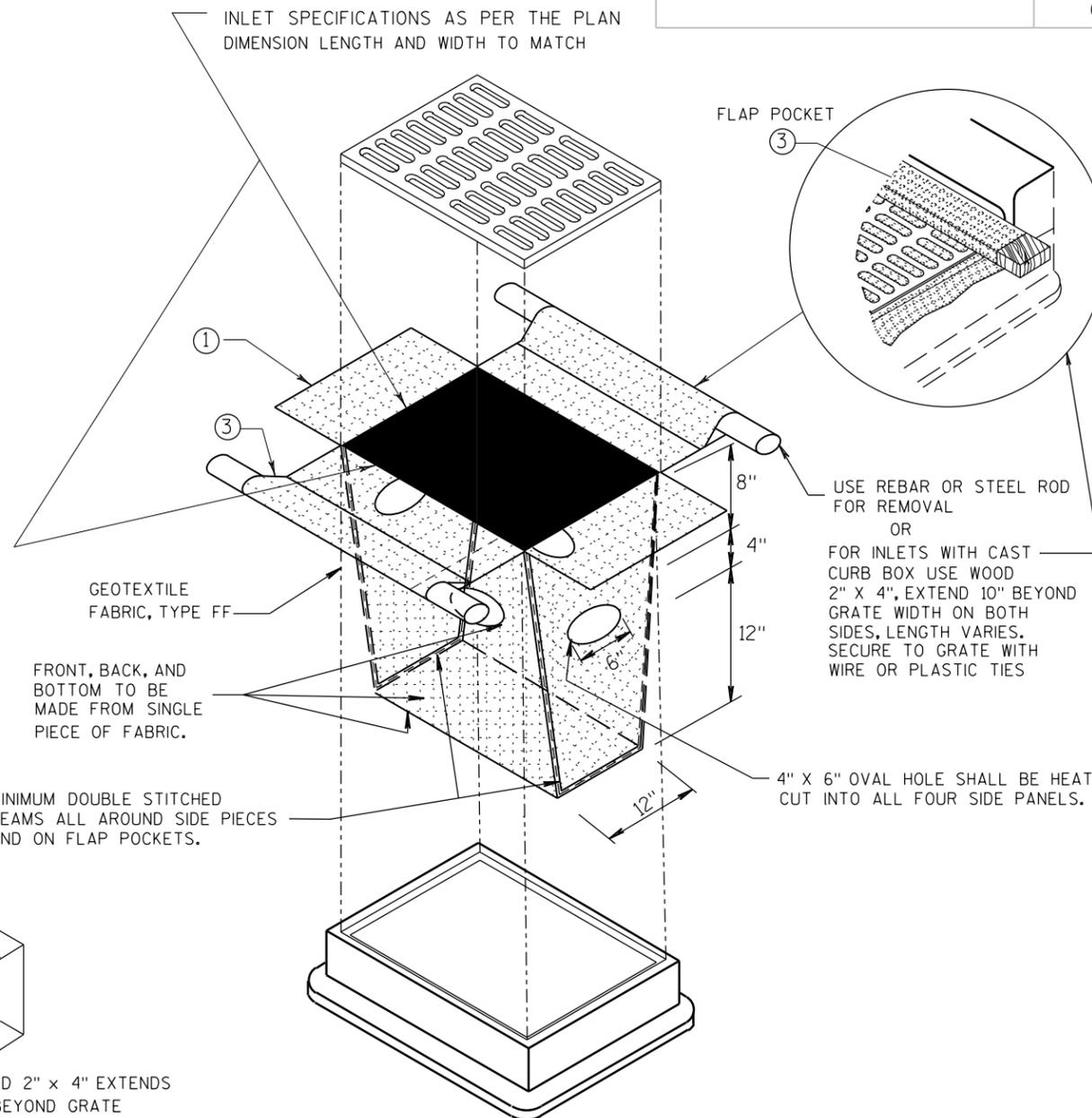
INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

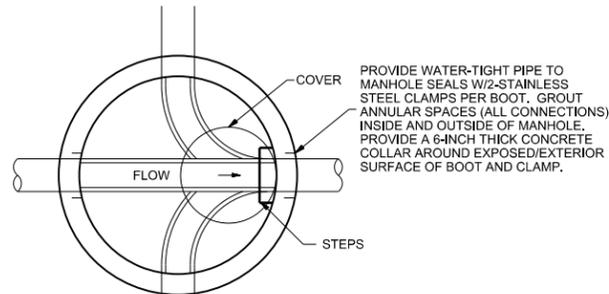
PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION CITY OF MARSHFIELD, WISCONSIN
INLET PROTECTION DETAIL TYPE A, B, C, AND D (WISDOT SDD 8E 10-2)

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SPECIFICATIONS:

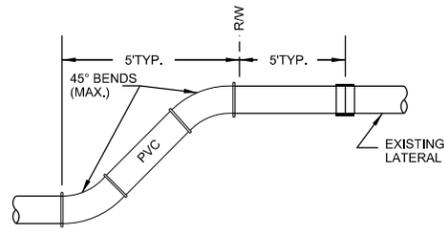
- MANUFACTURED TO ASTM C-478 SPECIFICATIONS
- CONCRETE STRENGTH - 4000 PSI
- STEEL DESIGN IN ACCORDANCE WITH ASTM C-478 0.12 SQ. IN./FT.
- ALL REINFORCING IS DESIGNED FOR MIN. 1" COVER
- STEP - STEEL, PLASTIC COATED 16" ON CENTER
- MONOLITHIC BASE WITH INLET AND OUTLET OPENING AS REQUIRED
- 48" DIAMETER MANHOLE WILL ACCOMMODATE A 24" DIAMETER PIPE PASSING STRAIGHT THROUGH.
- 48" DIAMETER-5" WALL 890 LBS./FT.

NOTE: ALL STRUCTURES AND COMPONENTS SHALL BE LABELED BY THE MANUFACTURER IN ACCORDANCE WITH PLAN/SCHEDULE IDENTIFICATION

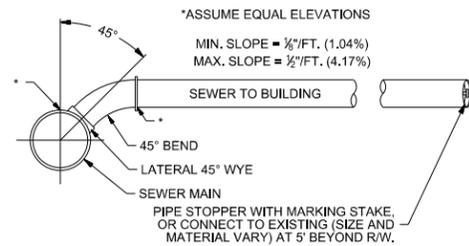


DEFINED FLOW CHANNELS REQUIRED FROM EACH INFLOWING PIPE TO THE DISCHARGE PIPE. (ALSO REQUIRED FOR DEAD-END MANHOLES.) ALL FLOWLINES SHALL BE SMOOTH.

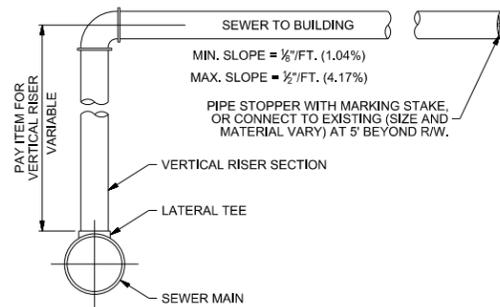
NOTE: INSIDE DROP CONNECTIONS SHALL NOT BE INSTALLED WITHIN 90° OF THE STEPS. SEE DROP MANHOLE DETAIL.



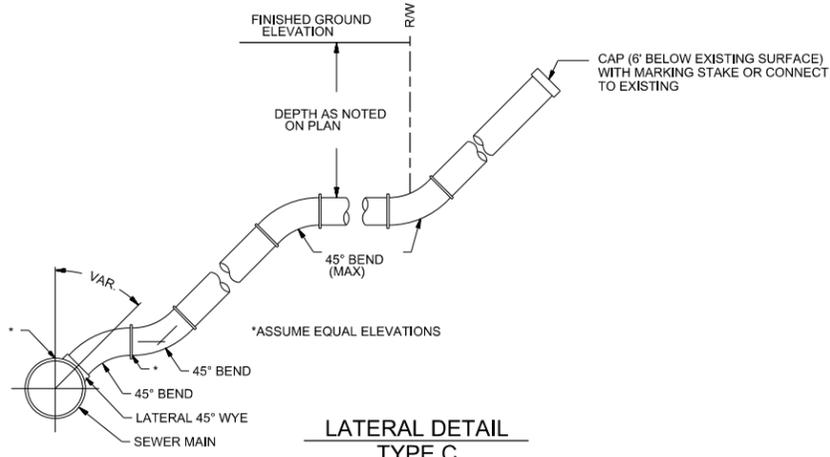
DROP CONNECTION TO EXISTING LATERAL



LATERAL DETAIL TYPE A



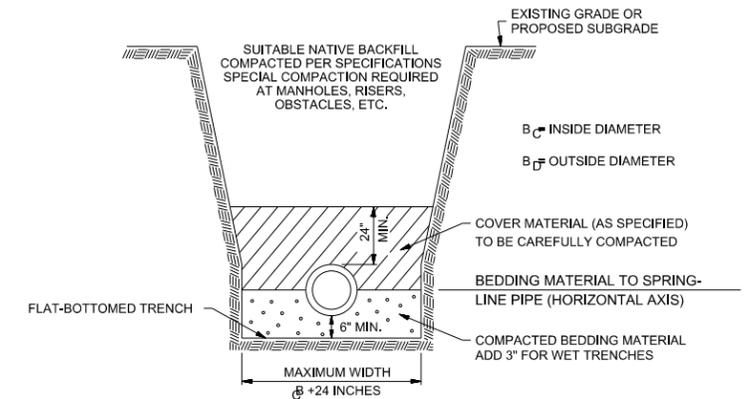
LATERAL/RISER DETAIL TYPE B



NOTES: MAINTAIN 30" HORIZONTAL CLEARANCE WHERE SANITARY SEWER LATERALS PARALLEL WATER SERVICES.

USE COVER MATERIAL AS BACKFILL FOR VERTICAL RISER

FERNCO CONNECTOR IF EXISTING LATERAL IS NOT PVC. GASKETED COUPLING IF EXISTING LATERAL IS PVC.



NOTES:

BEDDING AND COVER MATERIAL: CRUSHED STONE CHIPS MEETING THE FOLLOWING GRADING REQUIREMENTS.

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
1/2"	100
3/8"	90 TO 100
NO. 8	0 TO 15
NO. 30	0 TO 3

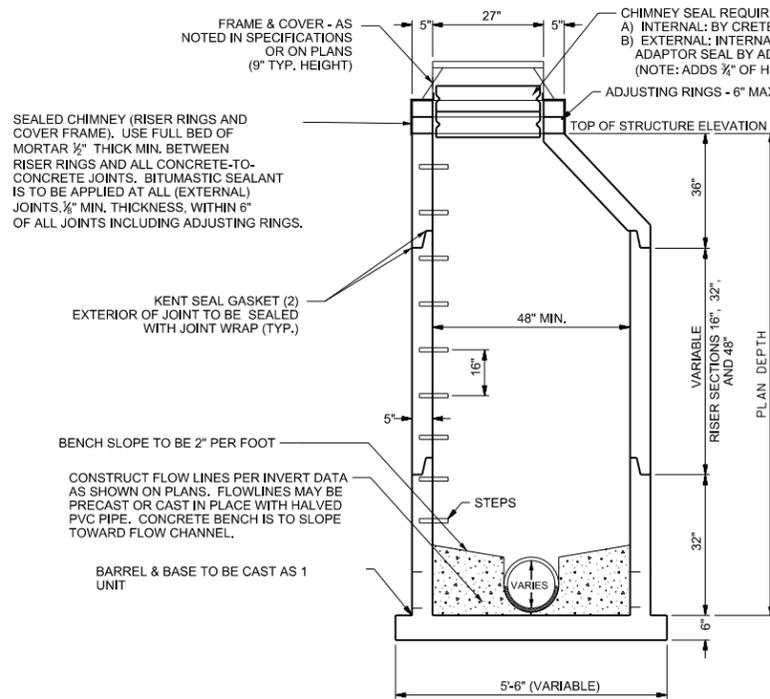
TRENCH WIDTH: THE MAXIMUM TRENCH WIDTH AT THE TOP OF THE PIPE SHALL BE B_o + 24 INCHES.

SPECIAL COMPACTION REQUIRED AT MANHOLES, RISERS, ETC.

TYPICAL TRENCH SECTION SANITARY SEWER CONSTRUCTION

GRAVITY MAINS, LATERALS AND FORCE MAINS

* AT APPROX. 20' UPSTREAM OF MANHOLES, INSTALL APPROVED NATIVE MATERIAL (CLAY TRENCH PLUG) TO FULL TRENCH DEPTH, 6' ALONG PIPE, ACROSS FULL TRENCH WIDTH, IN LEU OF BEDDING AND COVER MATERIAL.



PRE-CAST CONCRETE SANITARY MANHOLE, TYPE 1 DETAIL

NOTE: LENGTH OF SANITARY SEWER MAINS = MANHOLE CENTER TO MANHOLE CENTER. PIPE SLOPE CALCULATED FROM INSIDE MANHOLE WALL TO INSIDE MANHOLE WALL. INVERT ELEVATION IS AT INSIDE MANHOLE WALL. PAY DEPTH IS FROM BOTTOM OF CASTING TO LOWEST INVERT.

PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

SANITARY SEWER DETAILS

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NOTES: EXISTING WATER SYSTEM AND PROPOSED ISOLATION GATE VALVES SHALL ONLY BE OPERATED BY MARSHFIELD UTILITIES.

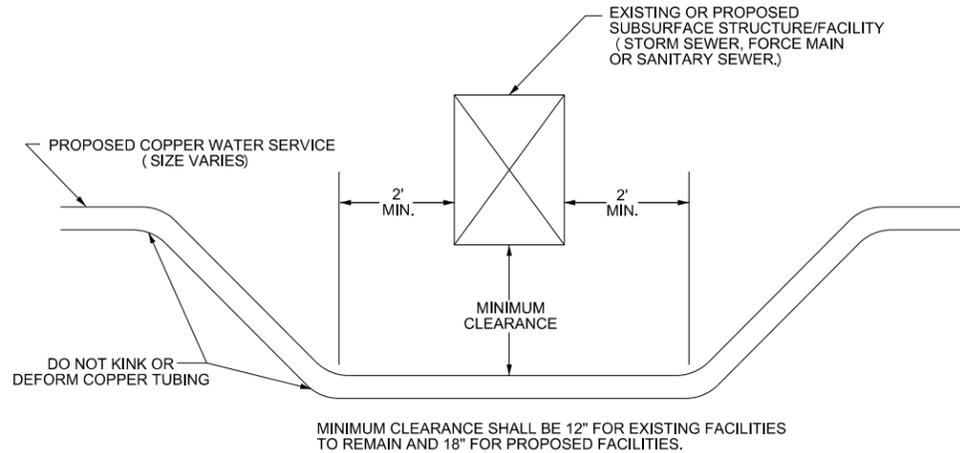
CONTRACTOR TO PROVIDE A CONTINUOUS SUPPLY OF SAFE WATER TO AFFECTED PROPERTIES, WHEN APPLICABLE.

ALL PIPE, VALVES, FITTINGS AND HYDRANTS TO BE POLYWRAPPED.

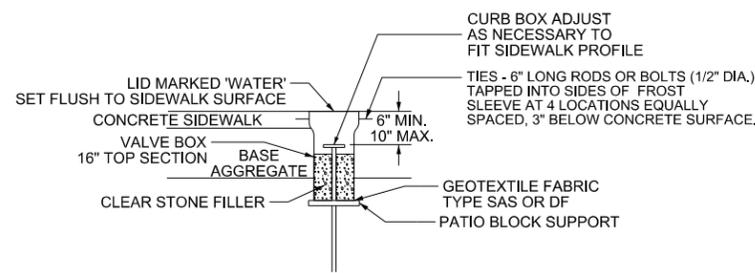
CONDUCTIVITY PROVISIONS SUCH AS STRAPS OR CABLES ARE REQUIRED FOR ALL JOINTS INCLUDING PIPE, VALVES, FITTINGS AND SLEEVES. CONDUCTIVITY TESTING WILL BE REQUIRED.

HYDROSTATIC TEST PRESSURE FOR WATER PIPE SHALL BE 150 PSI.

SPECIAL COMPACTION IS REQUIRED AT HYDRANTS, VALVE BOXES, CURB BOXES, AND OTHER RISERS.

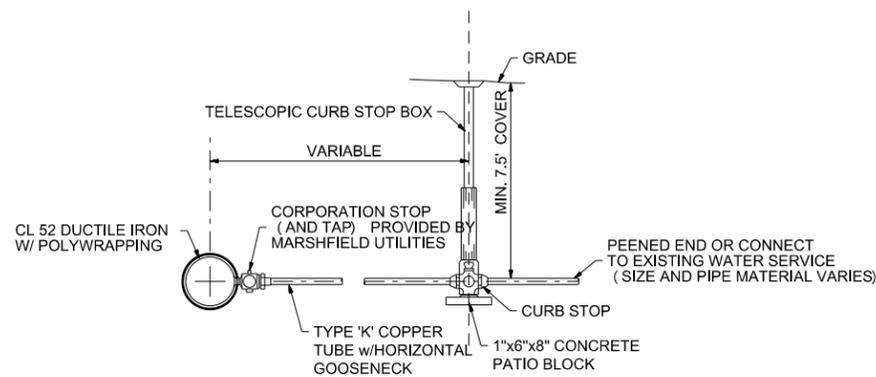


WATER SERVICE OFFSET

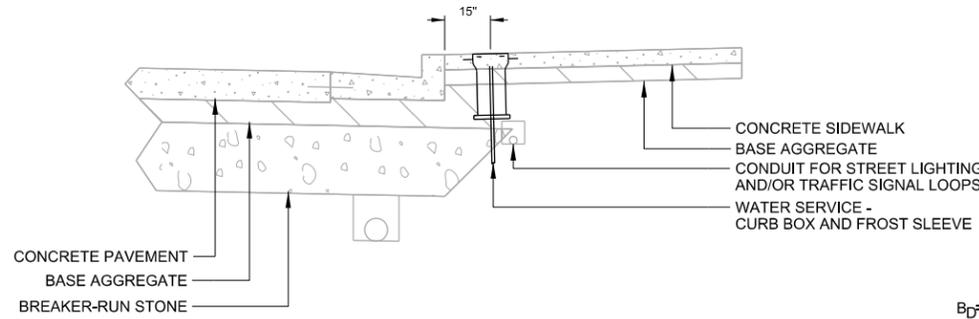


NOTE: CURB BOX TO BE CENTERED 1.25' BEYOND BACK OF CURB

CURB BOX FROST SLEEVE



TYPICAL WATER SERVICE CONNECTION
PROFILE VIEW



WATER SERVICE - CURB BOX LOCATION

CONCRETE TERRACE NTS

JOINT RESTRAINT SHALL BE REQUIRED. ACCEPTABLE MATERIALS INCLUDE 3/4" THREADED RODS (2) W/RETAINER GLANDS, RESTRAINING PIPE JOINT GASKETS, OR RESTRAINING MECHANICAL JOINT GLANDS (MEGA LUGS, ETC.) .

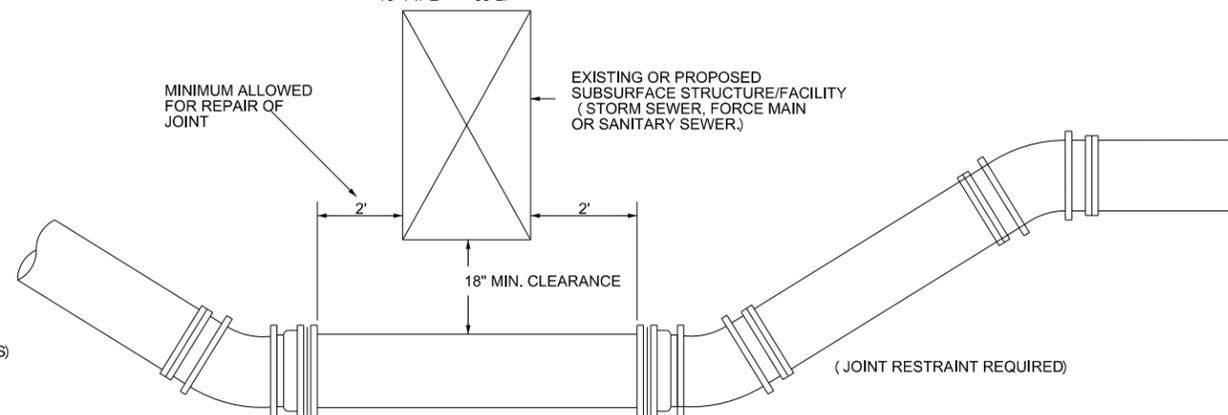
LENGTH OF PIPELINE TO BE RESTRAINED SHALL BE AS FOLLOWS:

RUN OF TEE
ALL SIZES = 10 LF EACH SIDE OF BRANCH

BRANCH OF TEE:
6" & 8" PIPE = 35 LF
10" PIPE = 45 LF
12" PIPE = 55 LF
16" PIPE = 65 LF

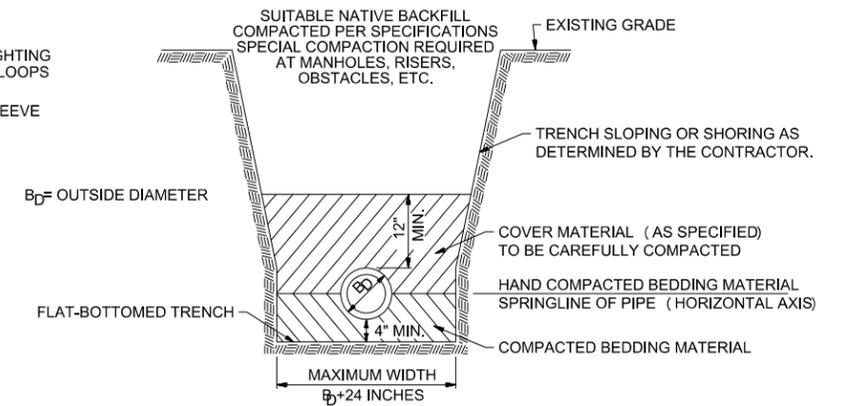
BENDS:
6" & 8" PIPE = 25 LF EACH SIDE OF FITTING
10" PIPE = 35 LF EACH SIDE OF FITTING
12" PIPE = 45 LF EACH SIDE OF FITTING
16" PIPE = 55 LF EACH SIDE OF FITTING

DEAD ENDS:
6" & 8" PIPE = 35 LF
10" PIPE = 45 LF
12" PIPE = 55 LF
16" PIPE = 65 LF



WATER MAIN OR HYDRANT LEAD OFFSET

NOTE: MJ OFFSET FITTINGS MAY BE USED IF APPROVED BY THE ENGINEER.

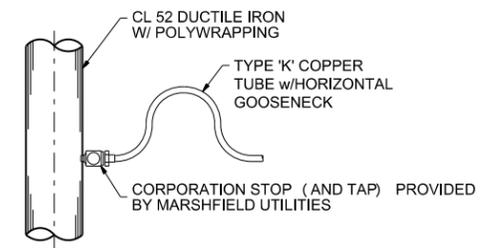


NOTES:

BEDDING AND COVER MATERIAL SHALL BE BANK-RUN SAND, CRUSHED BANK RUN GRAVEL, OR OTHER APPROVED MATERIAL CONFORMING SUBSTANTIALLY TO THE FOLLOWING GRADING REQUIREMENTS.

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
1"	100
3/4"	85 TO 100
NO. 40	15 TO 35
NO. 200	2 TO 10

TYPICAL TRENCH SECTION WATER MAIN AND WATER SERVICE CONSTRUCTION



TYPICAL WATER SERVICE CONNECTION

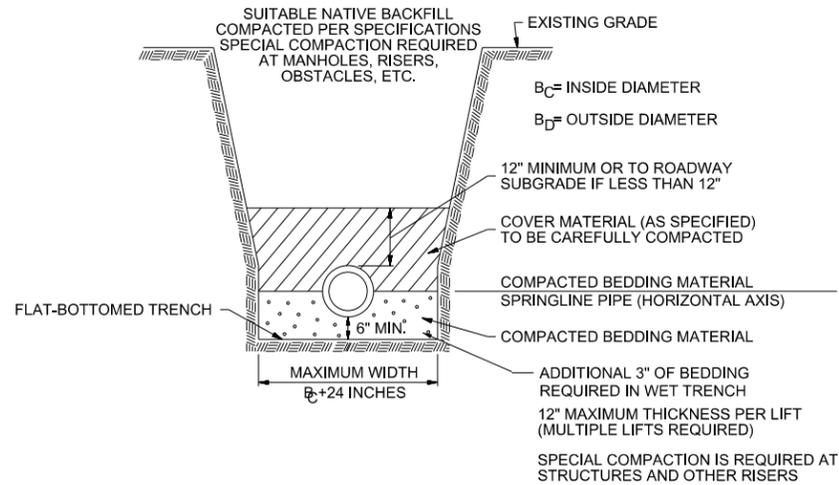
PLAN VIEW

PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

WATER DETAILS

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TYPICAL TRENCH SECTION

RCP STORM SEWER CONSTRUCTION

MATERIALS AND INSTALLATION SHALL COMPLY WITH THE TYPICAL TRENCH SECTION. BEDDING AND COVER MATERIAL SHALL BE AS FOLLOWS:

BEDDING & COVER MATERIAL

SCREENED SAND OR BANK RUN GRAVEL MEETING THE FOLLOWING GRADING REQUIREMENTS SHALL BE USED.

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
1"	100
3/4"	85 TO 100
NO. 40	15 TO 35
NO. 200	2 TO 10

SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE, (SICPP) STORM SEWER

MATERIALS AND INSTALLATION SHALL COMPLY WITH THE TYPICAL TRENCH SECTION. BEDDING AND COVER MATERIAL SHALL BE AS FOLLOWS:

FOR SEWER PIPE 18 INCHES IN DIAMETER OR LESS, CRUSHED STONE CHIPS MEETING THE FOLLOWING GRADING REQUIREMENTS SHALL BE USED.

SIEVE SIZES	PERCENTAGE PASSING BY WEIGHT
1/2 INCH	100%
3/8 INCH	90 - 100
NO. 8	0 - 15
NO. 30	0 - 3

FOR PIPE LARGER THAN 18 INCHES IN DIAMETER CRUSHED STONE CHIPS BEDDING MEETING THE FOLLOWING GRADING REQUIREMENTS SHALL BE USED.

SIEVE SIZES	PERCENTAGE PASSING BY WEIGHT
1 INCH	100%
3/4 INCH	90 - 100
3/8 INCH	20 - 55
NO. 4	0 - 10
NO. 8	0 - 5

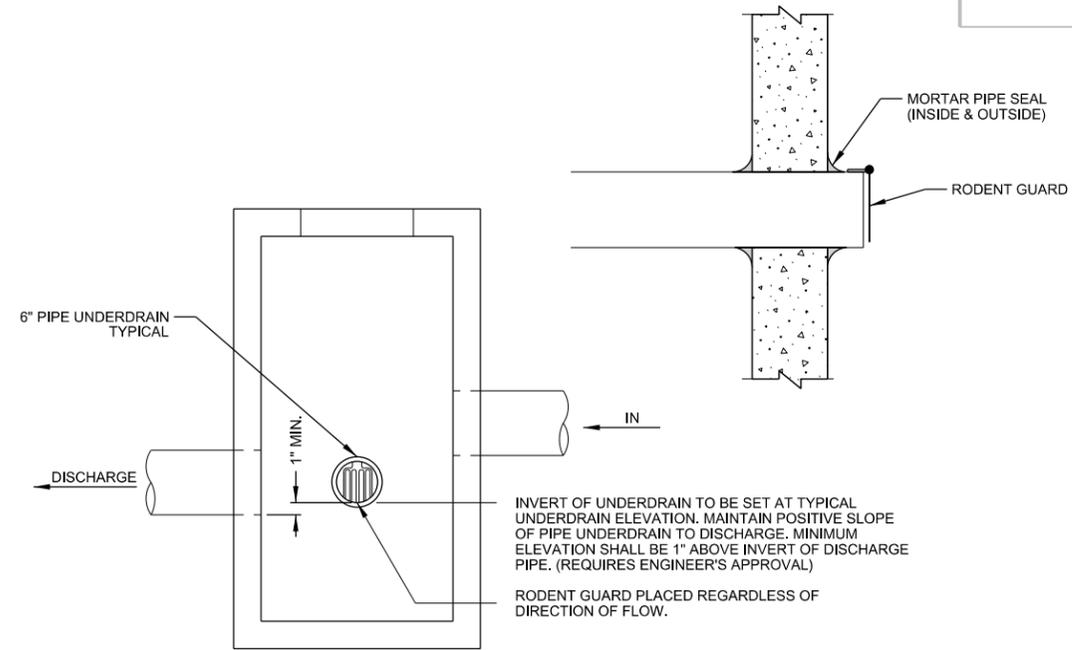
SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE, PERFORATED (SICPPP) STORM SEWER

MATERIALS AND INSTALLATION SHALL COMPLY WITH THE TYPICAL TRENCH SECTION. BEDDING AND COVER MATERIAL SHALL BE AS FOLLOWS:

WELL GRADED CRUSHED STONE CHIPS MEETING THE REQUIREMENTS OF CRUSHED STONE CHIPS OF SICPP. (NOTED ABOVE) SICPPP SHALL INCLUDE AN APPROVED WOVEN NYLON SOCK.

PVC STORM SEWER

MATERIALS AND INSTALLATION SHALL COMPLY WITH THE TYPICAL TRENCH SECTION FOR RCP STORM SEWER CONSTRUCTION, EXCEPT BEDDING AND COVER MATERIAL SHALL BE WELL GRADED CRUSHED BASE AGGREGATE DENSE 3/4-INCH.

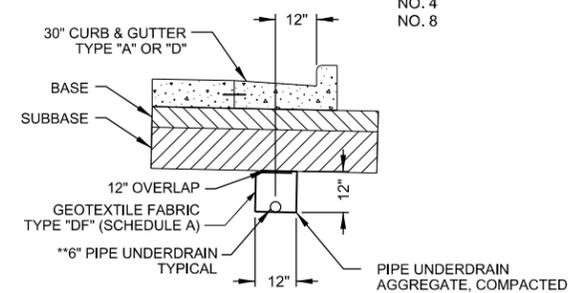


PIPE UNDERDRAIN CONNECTION DETAIL

TYPICAL FOR CATCH BASIN OR MANHOLE

PIPE UNDERDRAIN AGGREGATE SHALL BE CLEAN STONE AGGREGATE MEETING THE FOLLOWING GRADATION.

SIEVE SIZES	PERCENTAGE PASSING BY WEIGHT
1 INCH	100%
3/4 INCH	90 - 100
3/8 INCH	20 - 55
NO. 4	0 - 10
NO. 8	0 - 5



** MATERIAL SHALL BE SMOOTH INTERIOR CORRUGATED PERFORATED POLYETHYLENE EXCEPT IN A RADIUS (SICPPP)

GENERAL NOTES:

- UNDERDRAIN SHALL BE CONNECTED TO INLETS AS SHOWN REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS. RODENT SCREEN IS REQUIRED AT EACH UNDERDRAIN CONNECTION.
- UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROAD UNLESS SHOWN OR NOTED OTHERWISE ON THE PLAN SHEETS.

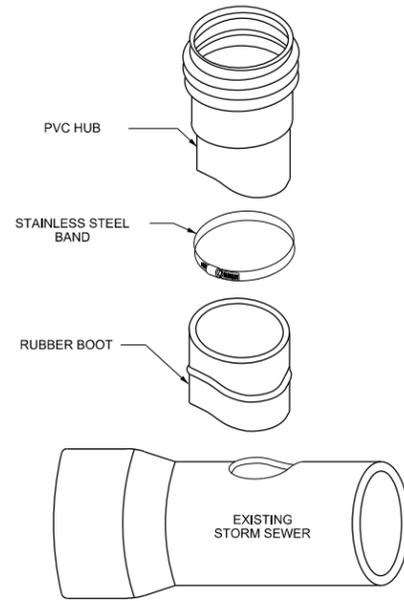
PIPE UNDERDRAIN DETAIL

PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

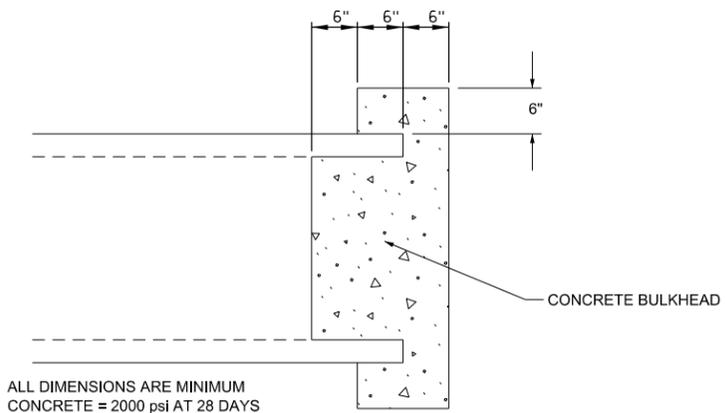
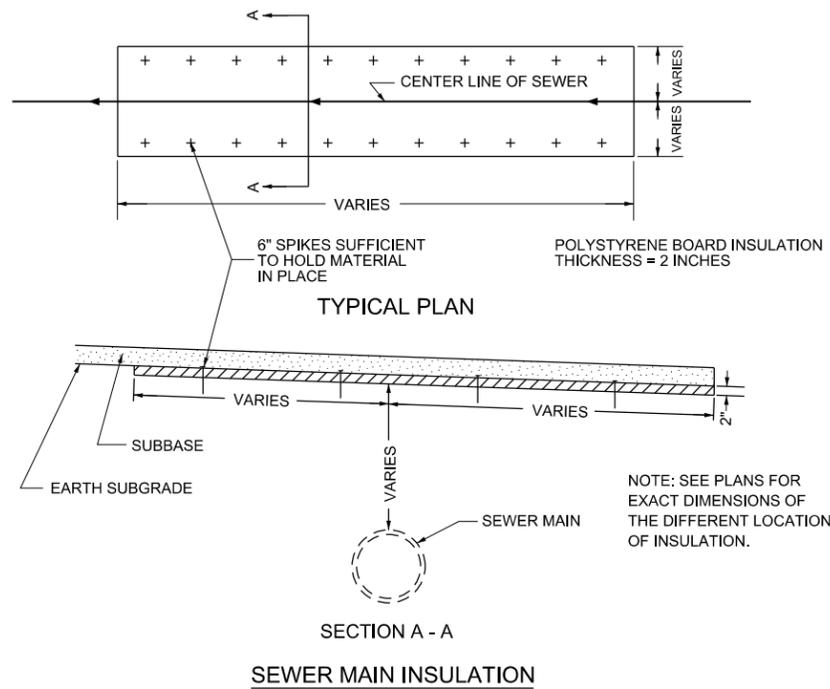
STORM SEWER DETAILS

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SIMILAR TO INSERTA TEE
INSERTA FITTINGS CO.

PVC PIPE TO STORM SEWER CONNECTION



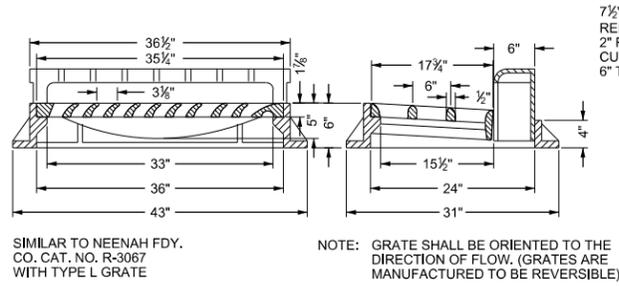
BULKHEADING DETAIL

PROJ. NO.

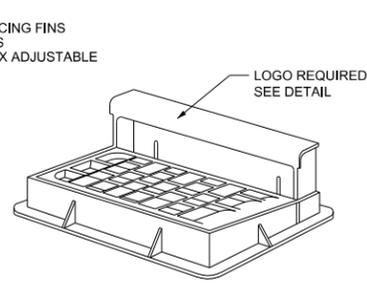
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

STORM SEWER DETAILS

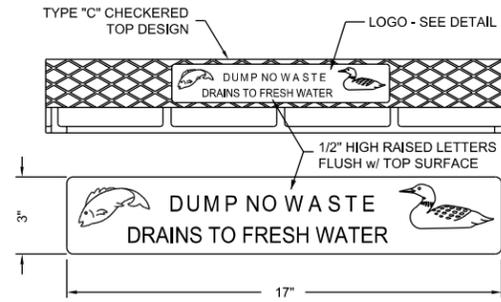
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CATCH BASIN COVER - TYPE "H"



(GRATE TYPE "L")



LOGO DETAIL

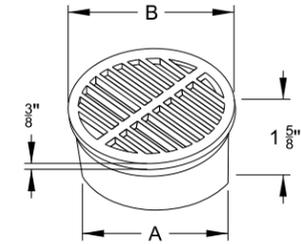
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING

SIMILAR TO NEENAH MANHOLE LID WITH TYPE "D" STANDARD FLAT DESIGN
NEENAH NO. R-2050
LOW PROFILE DESIGNATED "C-LP"
LOW PROFILE FRAME - NEENAH NO. R-1689 (NON-ROCKING)

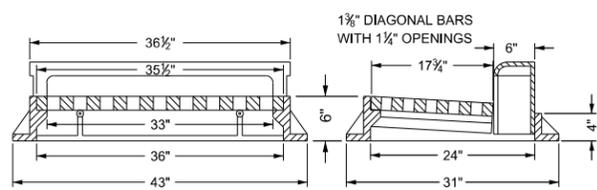


INLET COVER - TYPE "K"

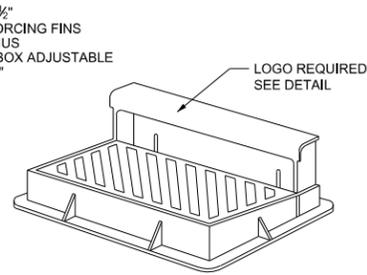
TYPE K GRATES				
TYPE	SIZE	MATERIAL	A	B
12K	12"	DUCTILE IRON	11.47"	15.7"
15K	15"	DUCTILE IRON	14.225"	19.45"
18K	18"	DUCTILE IRON	17.33"	23.5"

NOTE:
4.5" WIDE SOD STRIP REQUIRED AROUND INLET IF LOCATED IN GRASSED AREA.

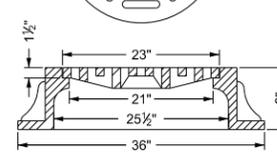
SIMILAR TO HARCO PEDESTRIAN DROP-IN GRATE



CATCH BASIN COVER - TYPE "H-S"



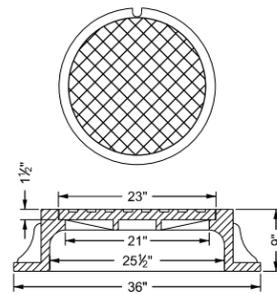
(GRATE TYPE "R")



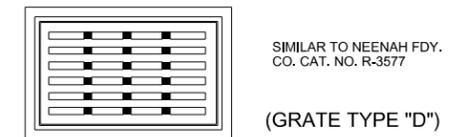
MANHOLE OR CATCH BASIN COVER - TYPE "C"

SIMILAR TO NEENAH FDY. CO. CAT. NO. R-3067 WITH TYPE R GRATE

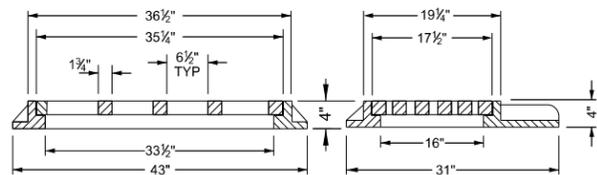
MANHOLE LID WITH TYPE C DIAMOND TOP DESIGN
NEENAH NO. R-1550-A
LOW PROFILE DESIGNATED "J-LP"
LOW PROFILE FRAME - NEENAH NO. R-1689 (NON-ROCKING)



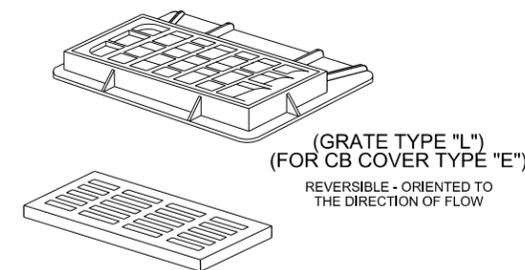
MANHOLE COVER - TYPE "J"



(GRATE TYPE "D")

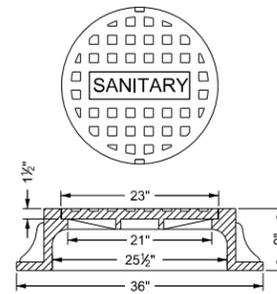


CATCH BASIN COVER - TYPE "E" AND "E-S"

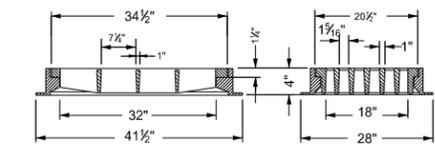


(GRATE TYPE "L") (FOR CB COVER TYPE "E")

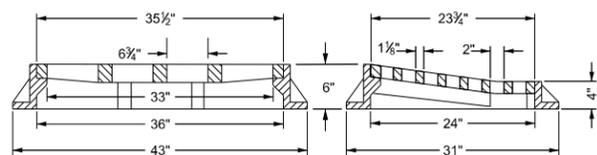
MANHOLE LID WITH TYPE B INDENTED TOP DESIGN
NEENAH NO. R-1550-A
LOW PROFILE DESIGNATED "JM-LP"
LOW PROFILE FRAME - NEENAH NO. R-1689 (NON-ROCKING)



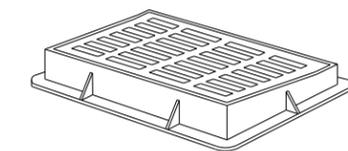
MANHOLE COVER - TYPE "JM"



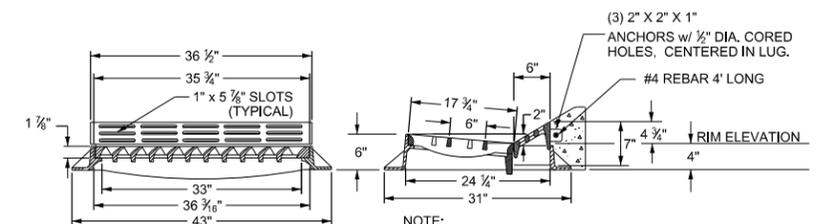
CATCH BASIN COVER - TYPE "U"



CATCH BASIN COVER - TYPE "D"

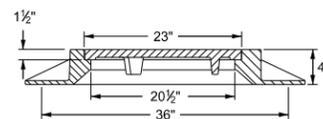


(GRATE TYPE "C")



CATCH BASIN COVER - TYPE "HM"

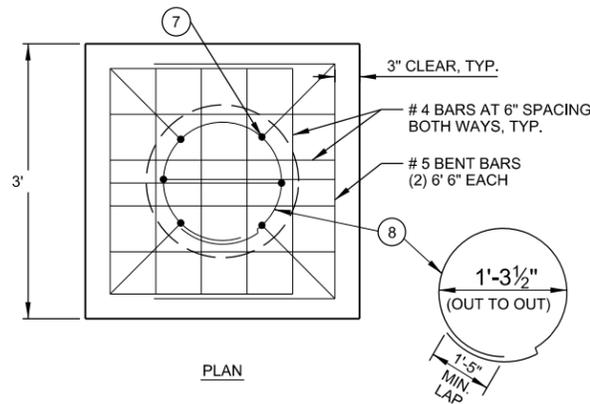
MANHOLE OR CATCH BASIN COVER FRAME - TYPE "XX-LP"



PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

CASTING
DETAILS

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QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6\"/>

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12\"/>

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4\"/>

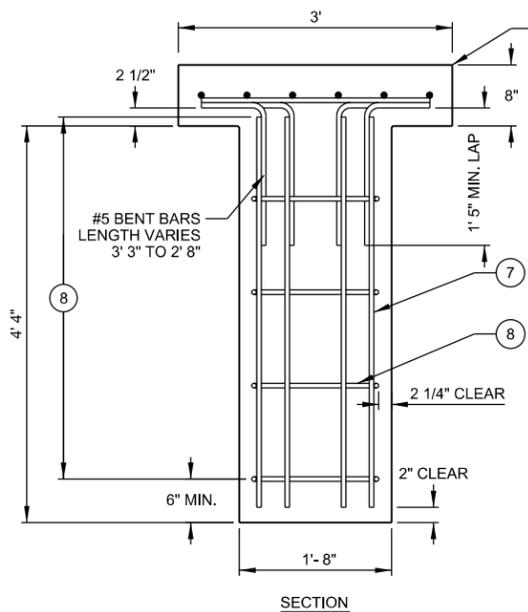
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

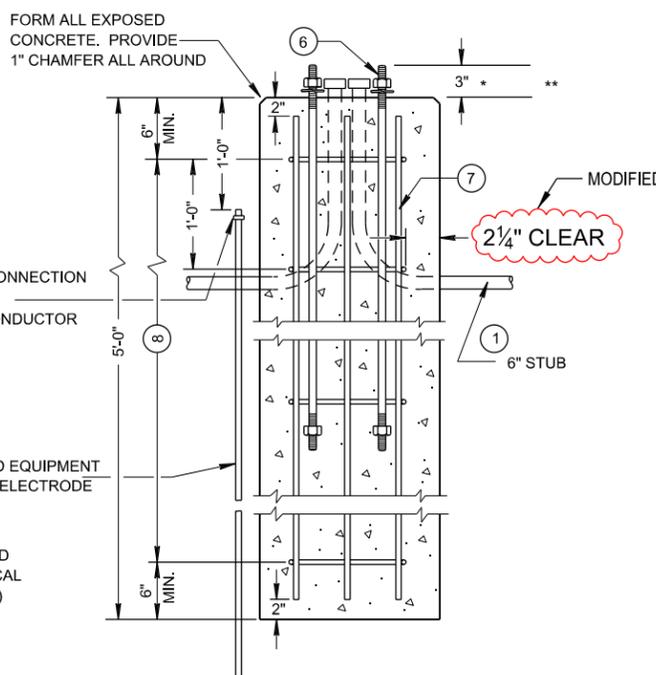
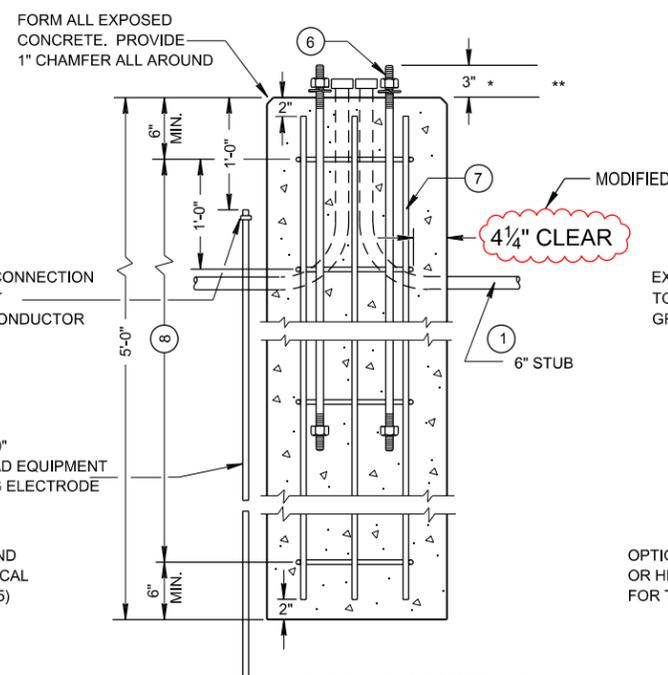
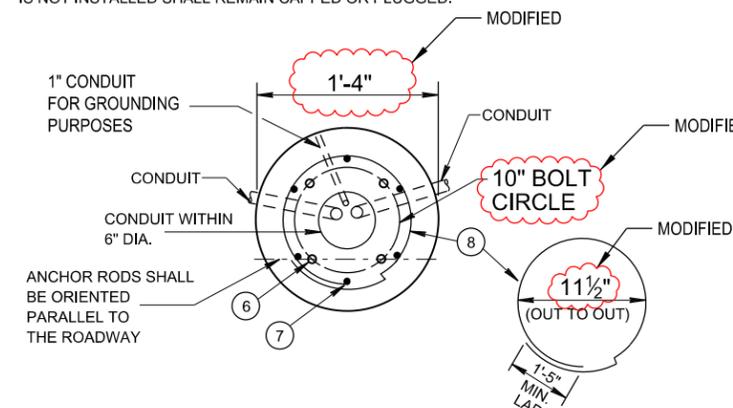
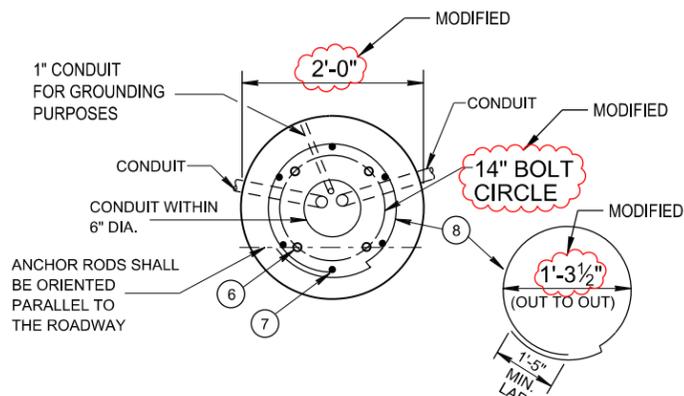
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

① THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

- ② (4) 1\"/>
- ③ (4) 1\"/>
- ④ (6) NO. 6 X 6'-8\"/>
- ⑤ (7) NO. 4 X 5'-1\"/>
- ⑥ (4) 1\"/>
- ⑦ (6) NO. 4 X 4'-8\"/>
- ⑧ (5) NO. 4 X 5'-1\"/>



PUBLIC ART BASE



**TYPE 5 MODIFIED - B
CONCRETE BASES**

TYPE 5 MODIFIED - BOLLARD

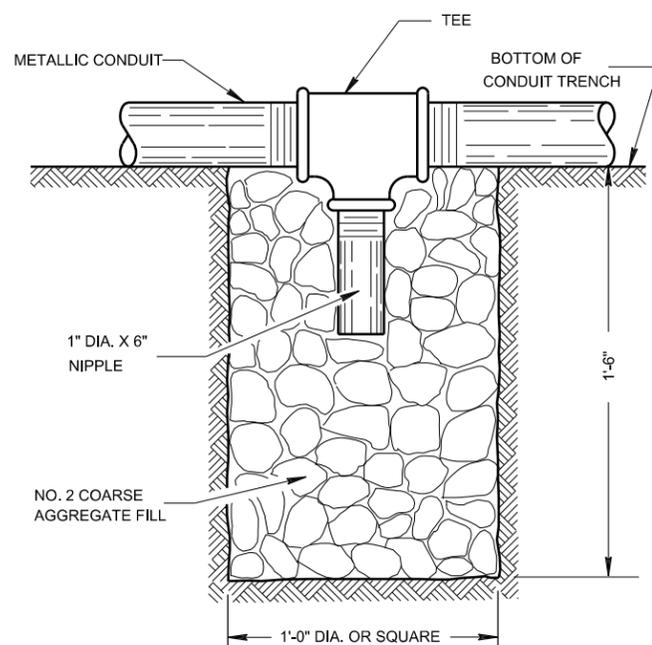
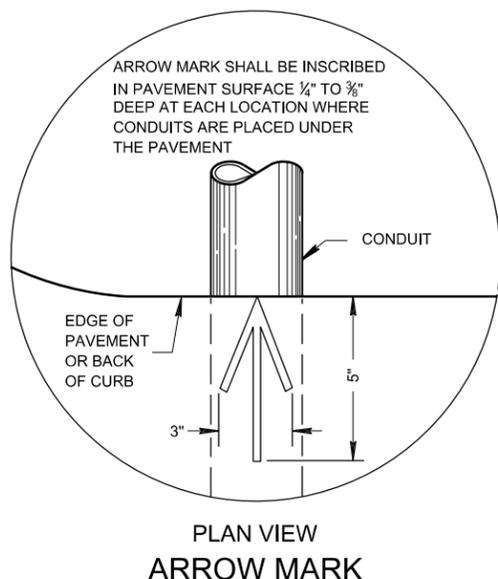
* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4\"/>

** FOR NON-BREAKAWAY INSTALLATIONS, 4 1/2\"/>

PROJ. NO.

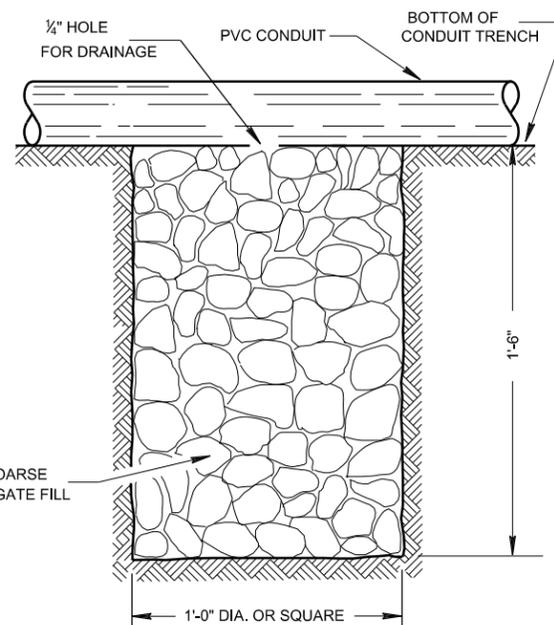
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

CONCRETE BASES,
TYPES 5 MODIFIED
-WISDOT 9-C-2-6-



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

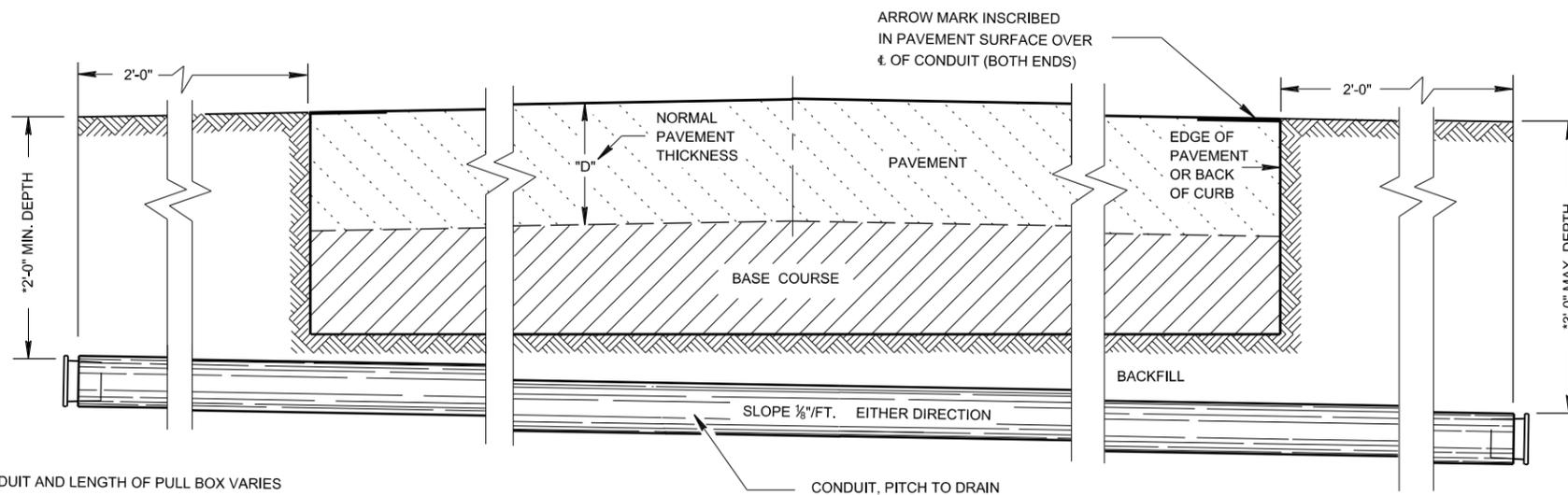
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

CONDUIT DETAIL
(WISDOT SDD 9 B 2-9)

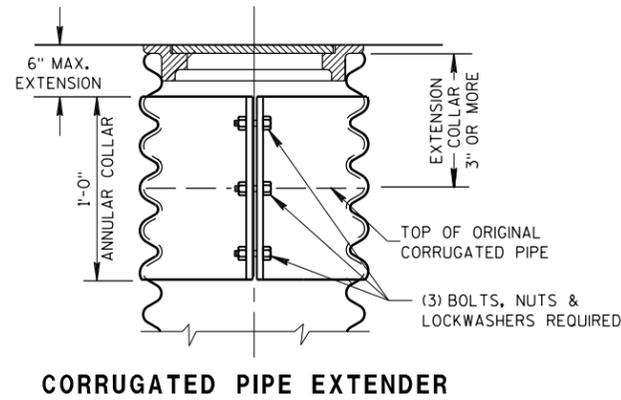
PLOTTED ON: 3/11/2016

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

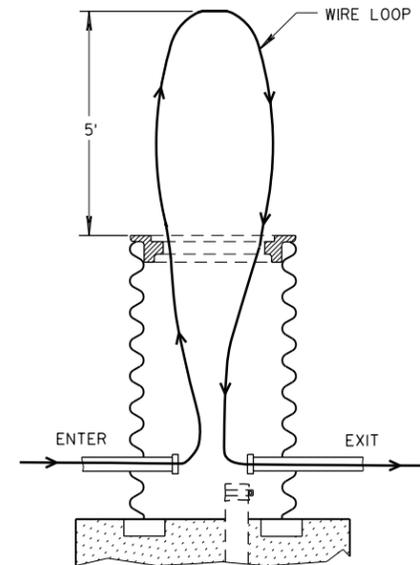
DIMENSION IN INCHES	CORRUGATED STEEL PIPE	CORRUGATED STEEL PIPE									
		PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48	
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4	
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2	
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2	
WEIGHT IN POUNDS *											
FRAME AND COVER		60	60	60	110	110	110	155	155	155	

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

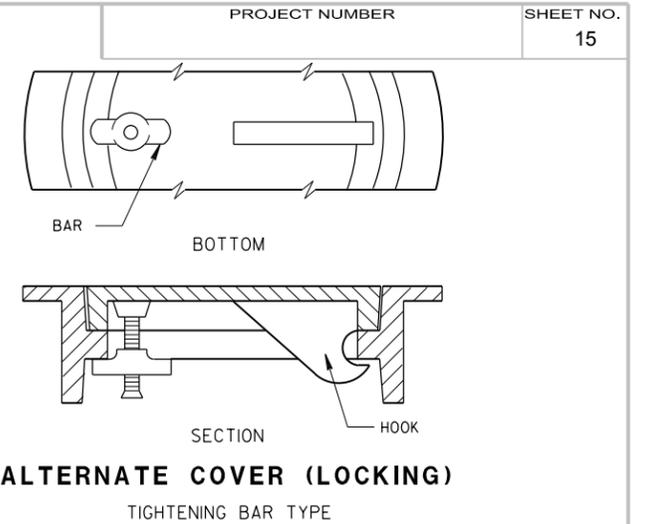
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

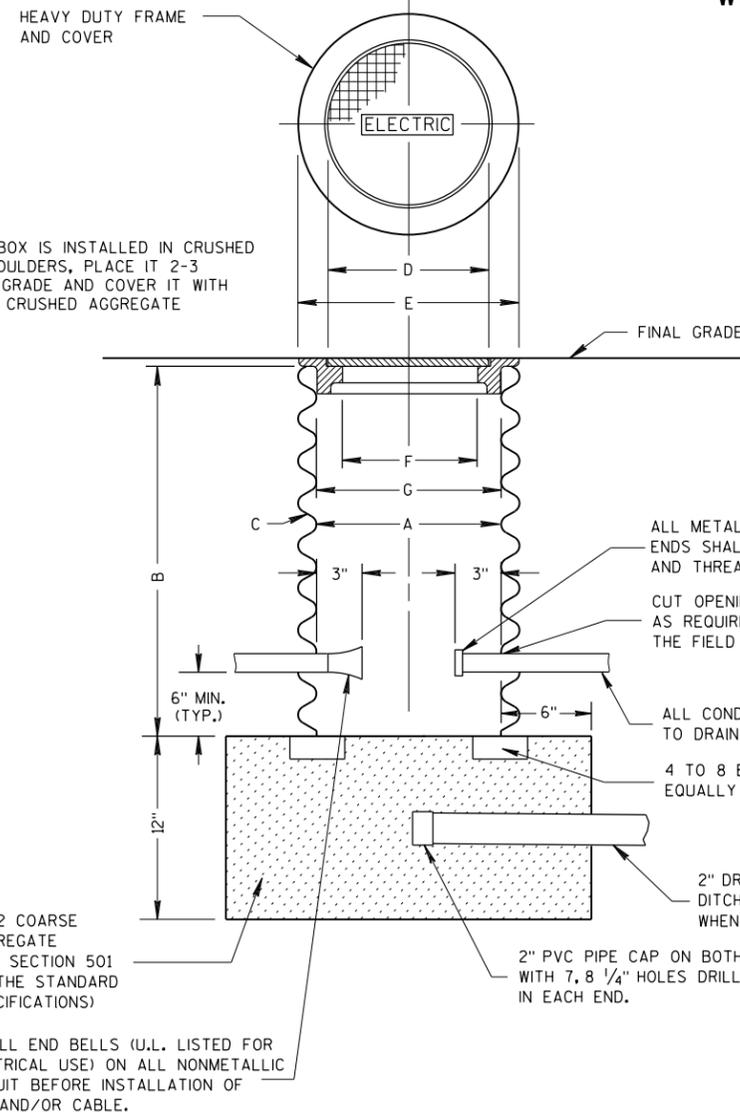


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

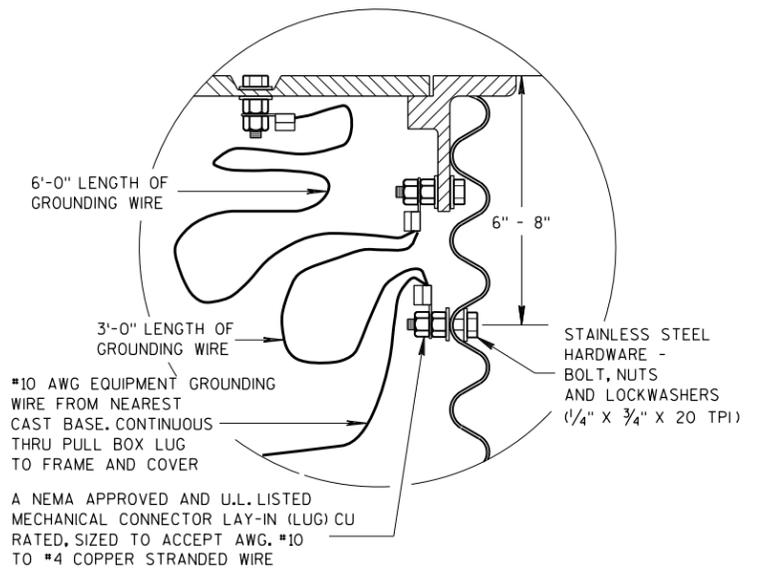


ALTERNATE COVER (LOCKING)

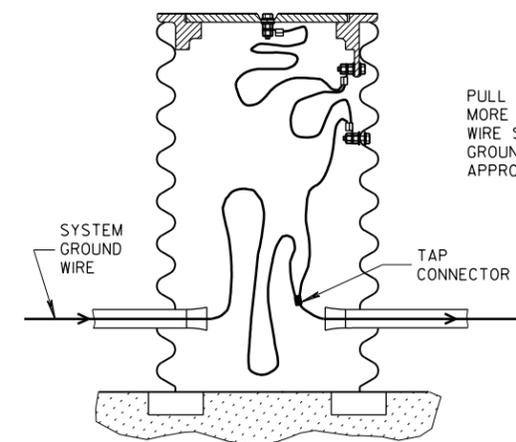
TIGHTENING BAR TYPE



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

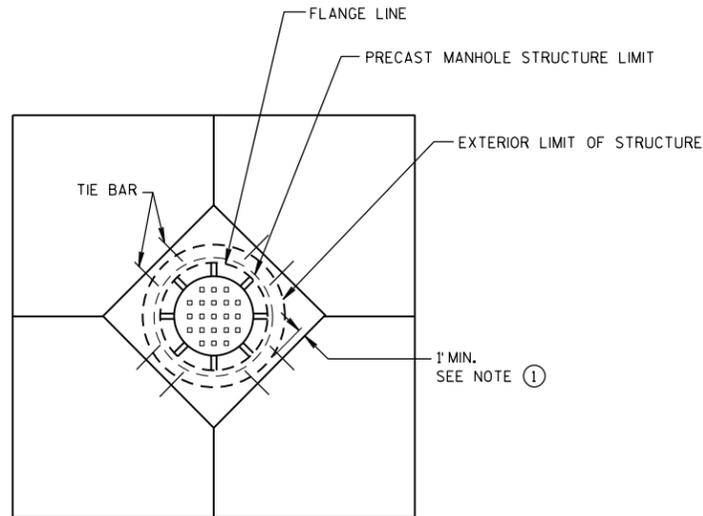
INSTALL END BELLS (U.L. LISTED FOR ELECTRICAL USE) ON ALL NONMETALLIC CONDUIT BEFORE INSTALLATION OF WIRE AND/OR CABLE.

PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET, PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

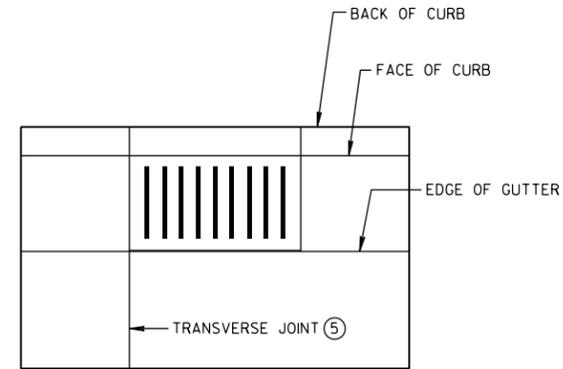
PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

PULL BOX DETAIL
(WISDOT SDD 9B 4-11)

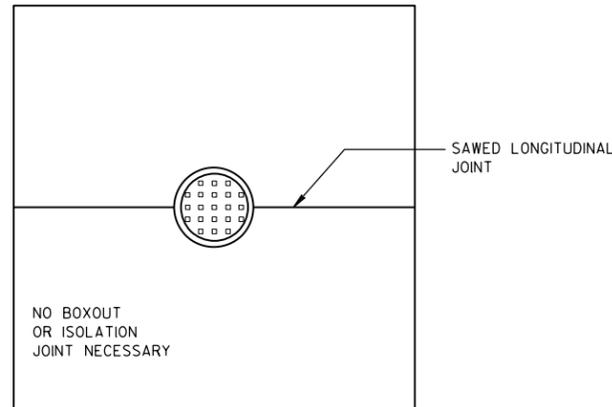
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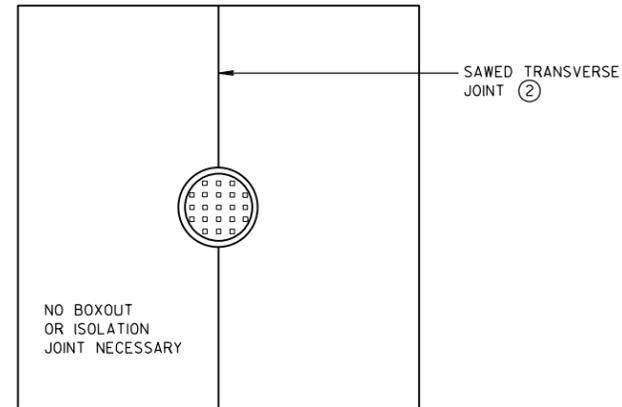
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



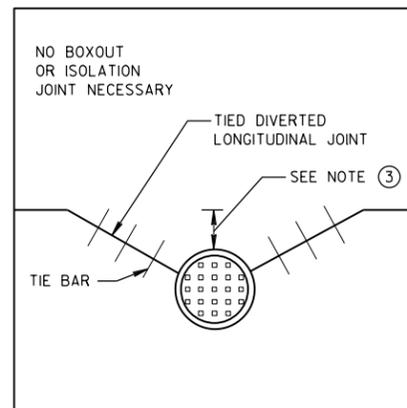
INLET WITH TRANSVERSE JOINT



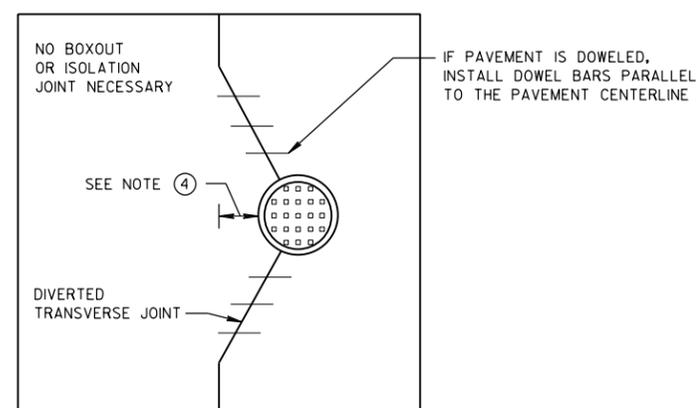
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



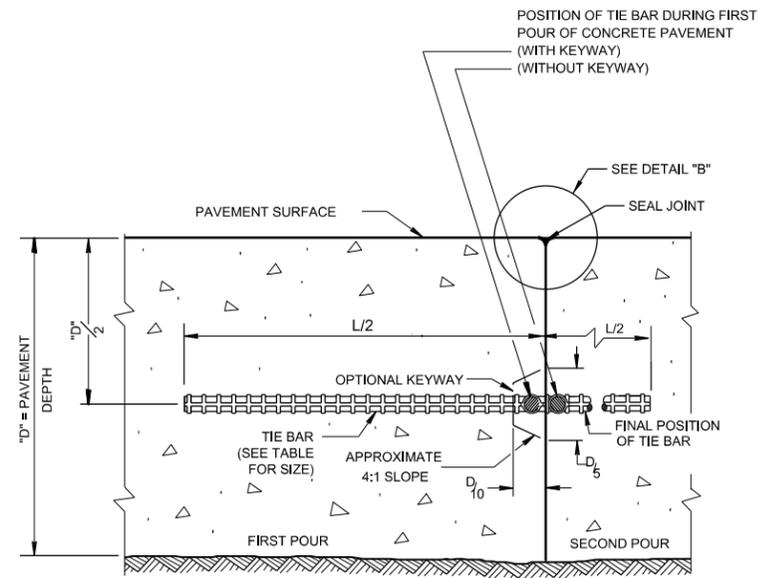
MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

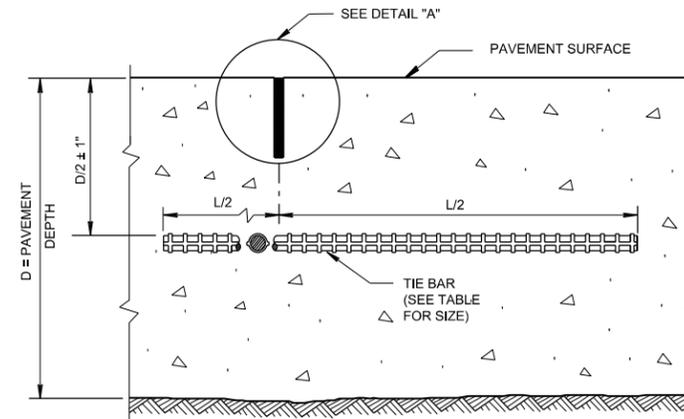
- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ④ IF DISTANCE FROM THE EDGE OF MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

PLOTTED ON: 3/11/2016

PROJ. NO. _____
 DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
 CITY OF MARSHFIELD, WISCONSIN
 CONCRETE PAVEMENT
 JOINTING AT UTILITY FIXTURES
 (WISDOT 13C-18-3d)



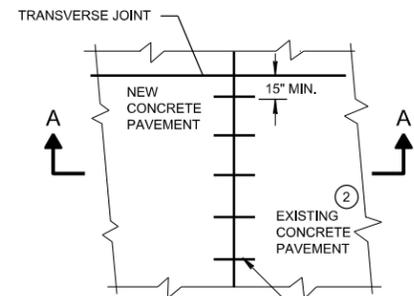
CONSTRUCTION JOINT



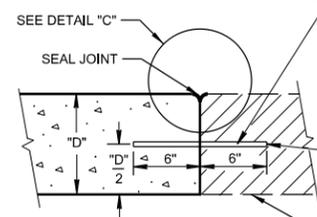
SAWED JOINT

GENERAL NOTES

- DO NOT SEAL OR FILL LONGITUDINAL JOINTS.
- CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.
- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



PLAN VIEW



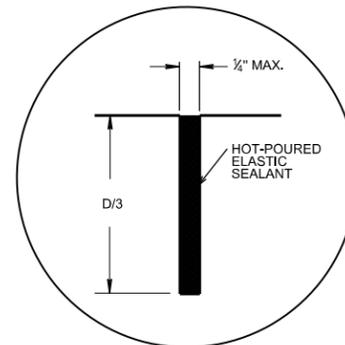
SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT

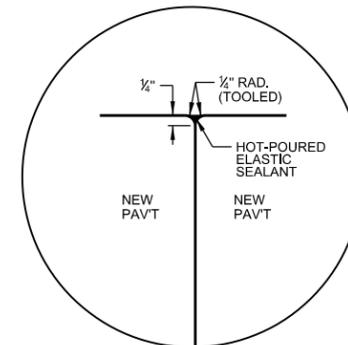
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①

MAXIMUM DRILL HOLE SIZE IS 1/8" GREATER THAN TIE BAR DIAMETER

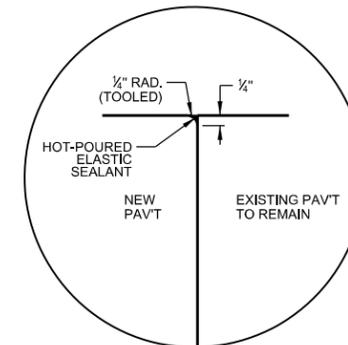
EXISTING CONCRETE PAVEMENT



DETAIL "A"



DETAIL "B"



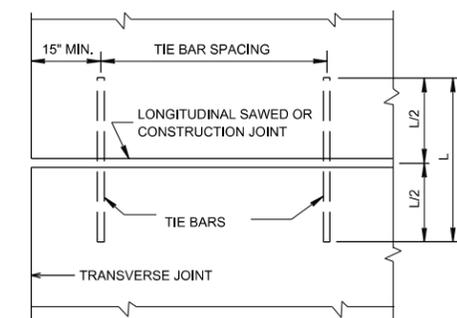
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**,

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS: SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS



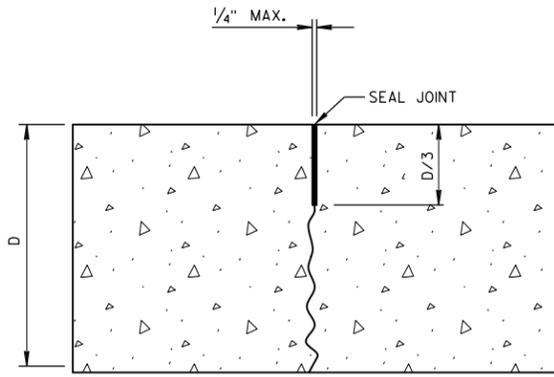
PLAN VIEW
SHOWING LOCATION OF TIE BARS

PROJ. NO.

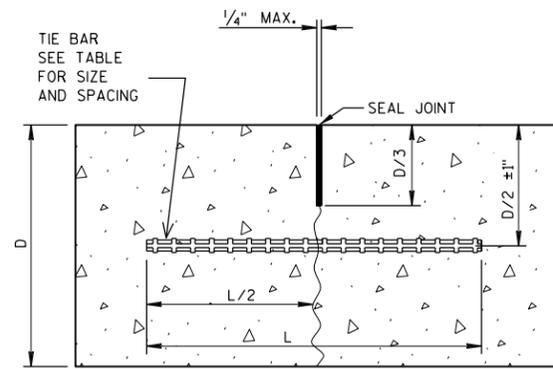
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

CONCRETE PAVEMENT
LONGITUDINAL JOINTS
AND PAVEMENT TIES DETAIL
(WISDOT 13C-1-18)

PLOTTED ON: 3/11/2016



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

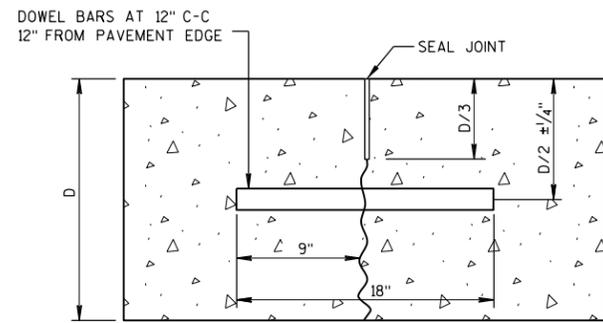
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
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≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24>**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

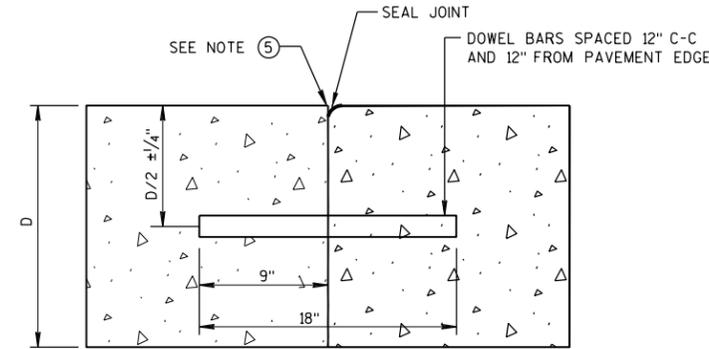
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS

GENERAL NOTES

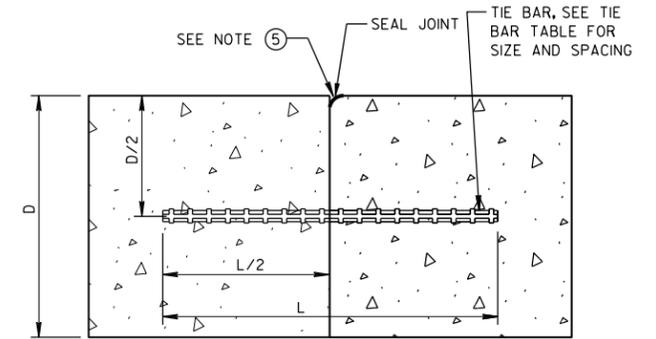
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
- ④ CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
- ⑤ IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
- ⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY



DOWELED-TRANSVERSE



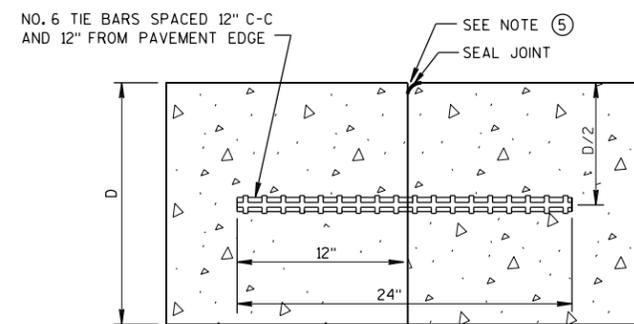
DOWELED TRANSVERSE ③



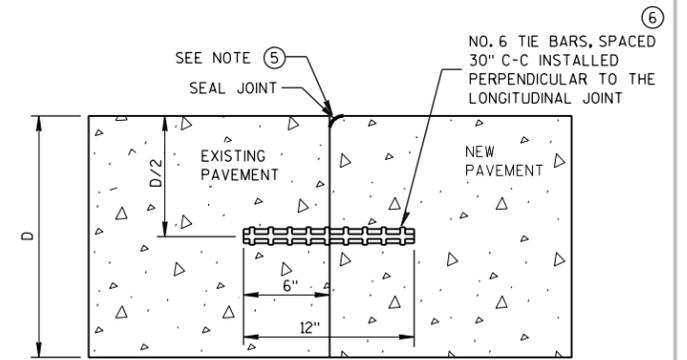
TIED LONGITUDINAL

CONTRACTION JOINTS

SEE NOTE ②



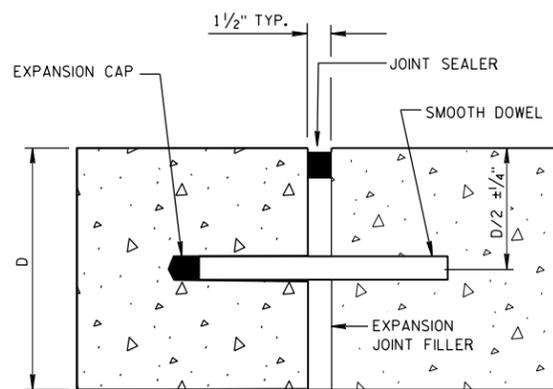
TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

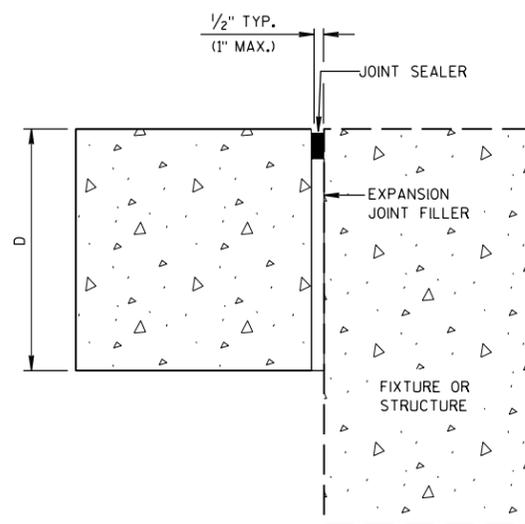
CONSTRUCTION JOINTS

SEE NOTE ④



DOWELED-TRANSVERSE

SEE NOTE ①



UNTIED-LONGITUDINAL

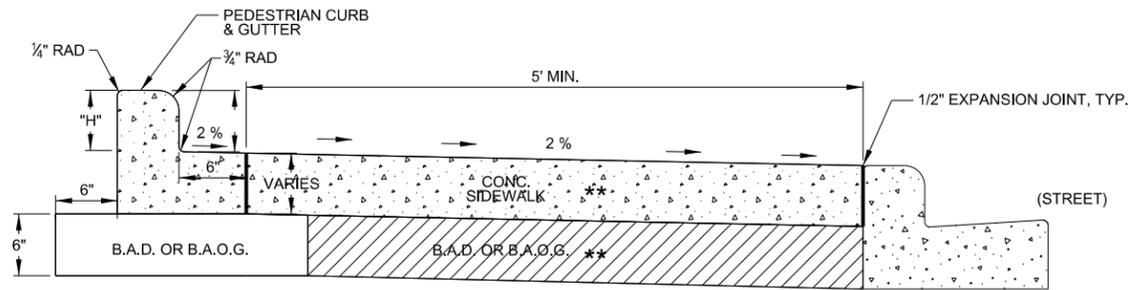
EXPANSION JOINTS

PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

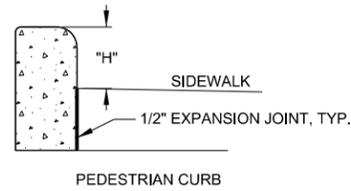
**CONCRETE PAVEMENT
JOINT TYPES
(WISDOT 13C 18-3c)**

PROJECT NUMBER	SHEET NO.
	19

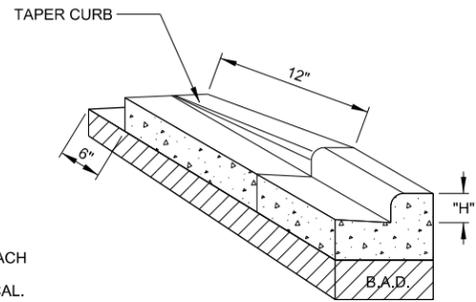


** THICKNESS OF CONCRETE SIDEWALK AND BASE VARIES - SEE PLANS AND DETAILS

'PEDESTRIAN CURB & GUTTER'



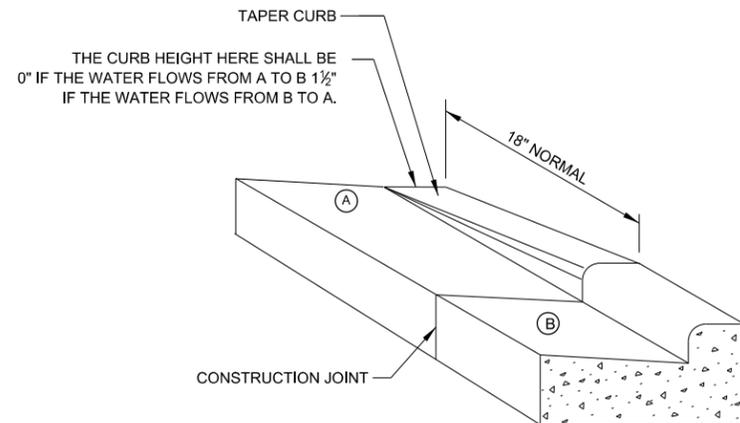
PEDESTRIAN CURB



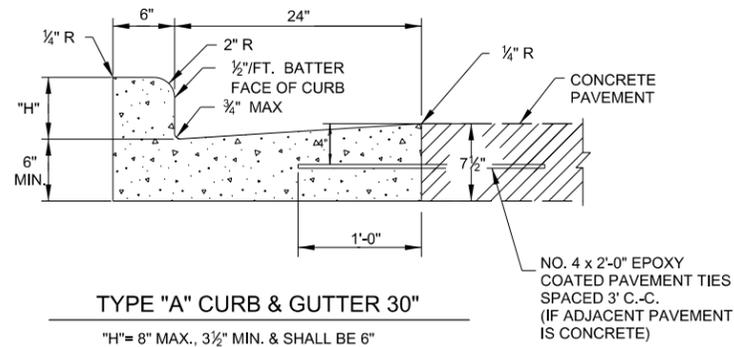
'PEDESTRIAN CURB' AND/OR CURB & GUTTER TERMINI

- CONTRACTION JOINTS TO BE SPACED 5' TYP.
- AT BUILDING CORNERS ALIGN CONTRACTION JOINTS WITH EACH FACE OF THE BUILDING.
- THE EXPOSED FACE OF PEDESTRIAN CURB SHALL BE VERTICAL.

'PEDESTRIAN CURB' AND/OR CURB & GUTTER DETAIL

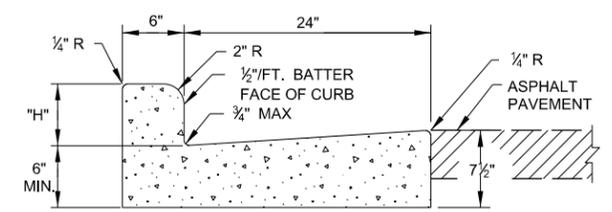


DETAIL OF CURB & GUTTER TERMINI



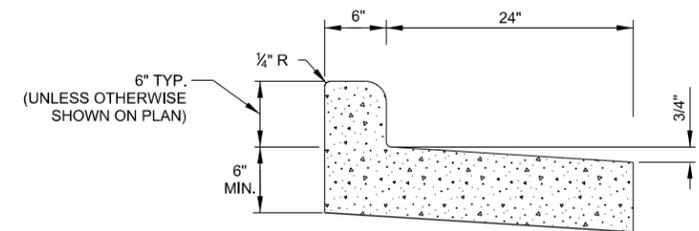
TYPE "A" CURB & GUTTER 30"

"H"= 8" MAX., 3 1/2" MIN. & SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE PLANS



TYPE "D" CURB & GUTTER 30"

"H"= 8" MAX., 3 1/2" MIN. & SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE PLANS

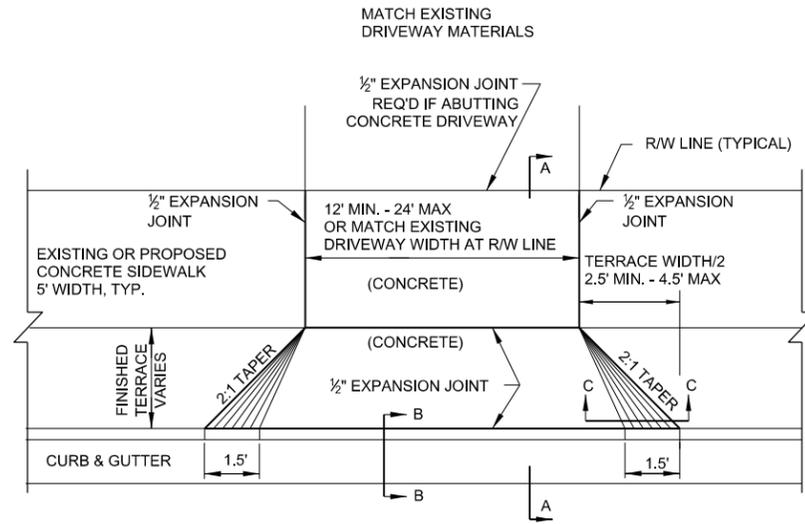


REJECT CURB & GUTTER

WEST 2ND STREET
CEDAR AVENUE

PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION CITY OF MARSHFIELD, WISCONSIN
CONCRETE CURB & GUTTER DETAILS

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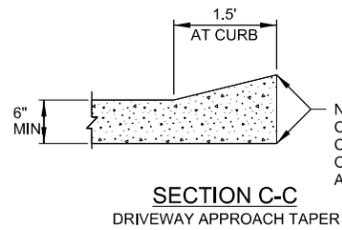


ENTRANCE DETAIL (PE'S & CE'S)
CURB & GUTTER WITH CONCRETE SIDEWALK

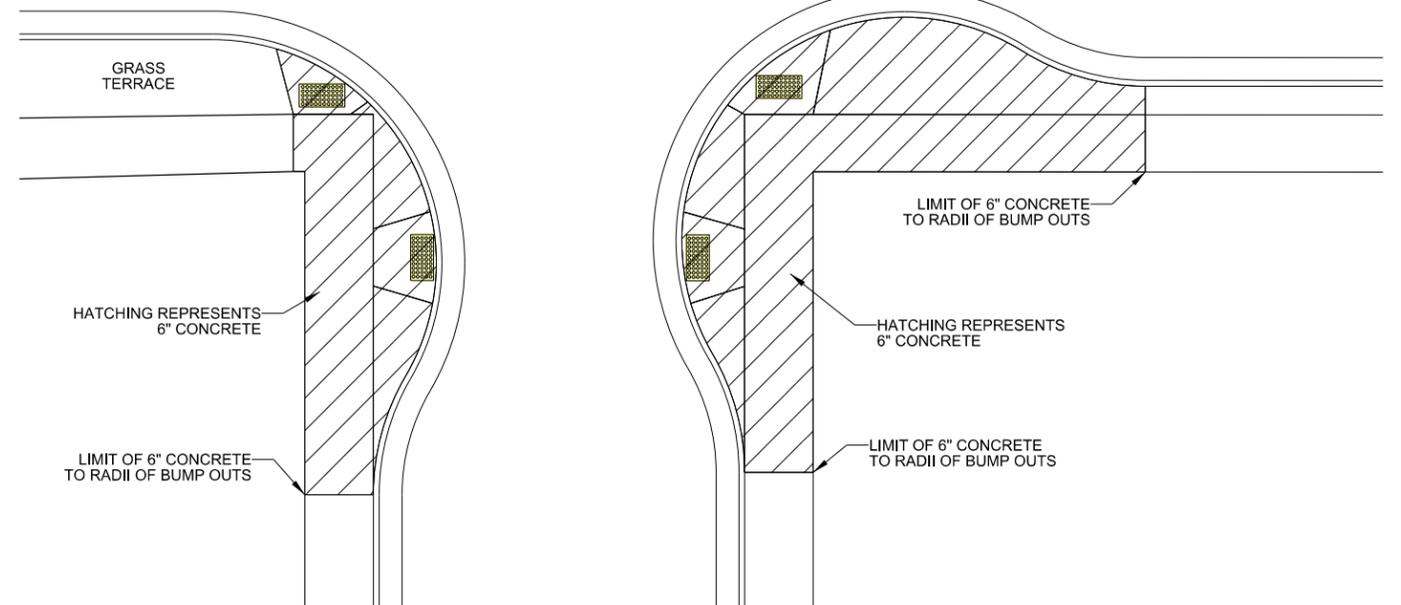
NOTE: THE EXACT LOCATION & WIDTHS OF ENTRANCES TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

**** MINIMUM DRIVEWAY TYPICAL SECTIONS**

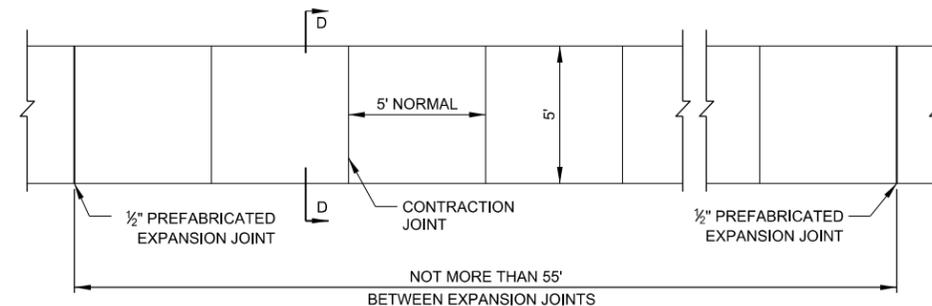
- GRAVEL DRIVEWAYS: 6" BASE AGGREGATE DENSE 3/4"
- MILLINGS DRIVEWAYS: 3" ASPHALT MILLINGS OVER 6" BASE AGGREGATE DENSE 1 1/4"
- ASPHALT DRIVEWAYS: 3" HMA TYPE E-1.0 OVER 6" BASE AGGREGATE DENSE 1 1/4"
- CONCRETE DRIVEWAYS: 6" OR 8" CONCRETE OVER 6" BASE AGGREGATE DENSE 1 1/4"



NOTE: CONCRETE IN THE TAPER AREA SHALL BE CONSTRUCTED TO THE FULL DEPTH AT THE OUTSIDE EDGE, AND THE EXPANSION JOINT AT THE CURB SHALL MATCH THIS DEPTH.

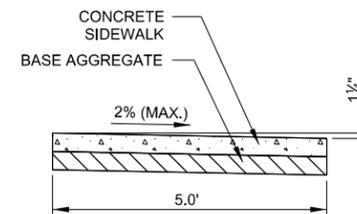


TYPICAL BUMP OUT
6" SIDEWALK

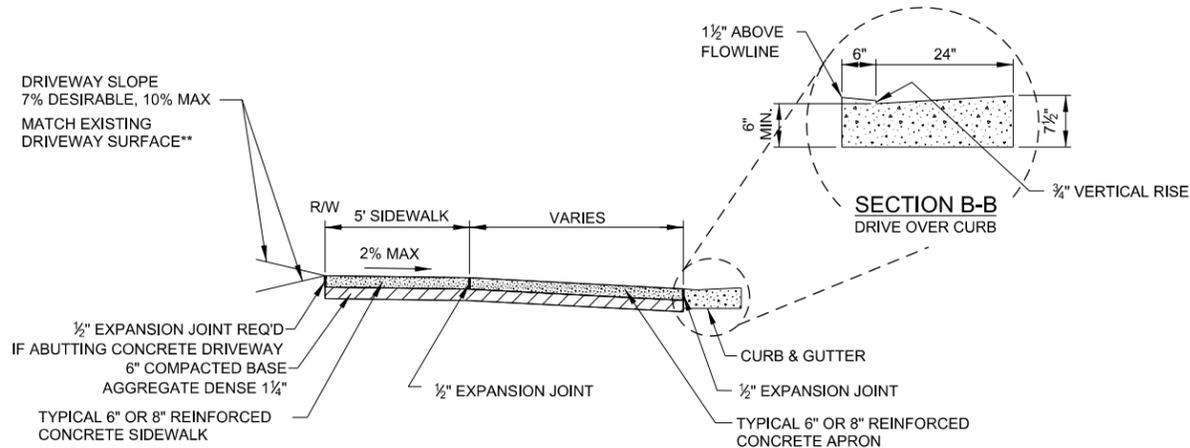


STANDARD 5' SIDEWALK

- TYPICAL SIDEWALK SECTION:
- 4" CONCRETE SIDEWALK OVER 4" BASE AGGREGATE
 - 5" CONCRETE SIDEWALK OVER 4" BASE AGGREGATE
 - 6" CONCRETE SIDEWALK OVER 6" BASE AGGREGATE
 - 8" CONCRETE SIDEWALK OVER 6" BASE AGGREGATE



SECTION D-D
SIDEWALK CROSS SLOPE



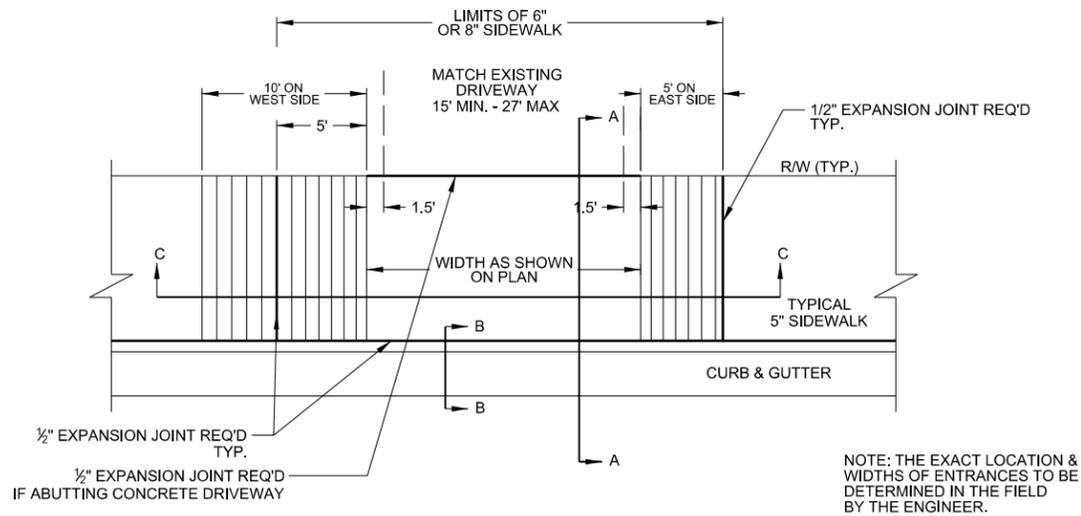
SECTION A-A

PROJ. NO. 312124

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

CONCRETE ENTRANCE
CONCRETE SIDEWALK
DETAILS

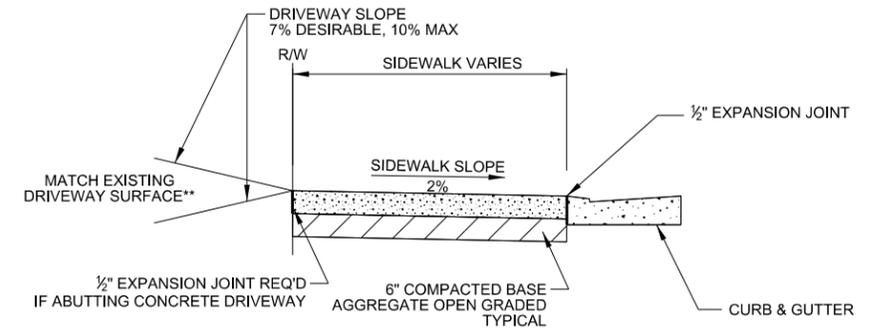
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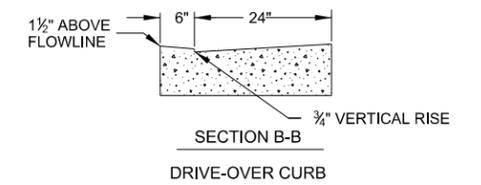
ENTRANCE DETAIL (PE'S & CE'S)
CURB & GUTTER WITH CONCRETE SIDEWALK
2ND STREET (CHESTNUT - CENTRAL)

** MINIMUM DRIVEWAY TYPICAL SECTIONS

- GRAVEL DRIVEWAYS: 6" BASE AGGREGATE DENSE 3/4"
- MILLINGS DRIVEWAYS: 3" ASPHALT MILLINGS OVER 6" BASE AGGREGATE DENSE 1 1/4"
- ASPHALT DRIVEWAYS: 3" HMA TYPE E-1.0 OVER 6" BASE AGGREGATE DENSE 1 1/4"
- CONCRETE DRIVEWAYS: 8" CONCRETE OVER 6" BASE AGGREGATE DENSE 1-1/4"

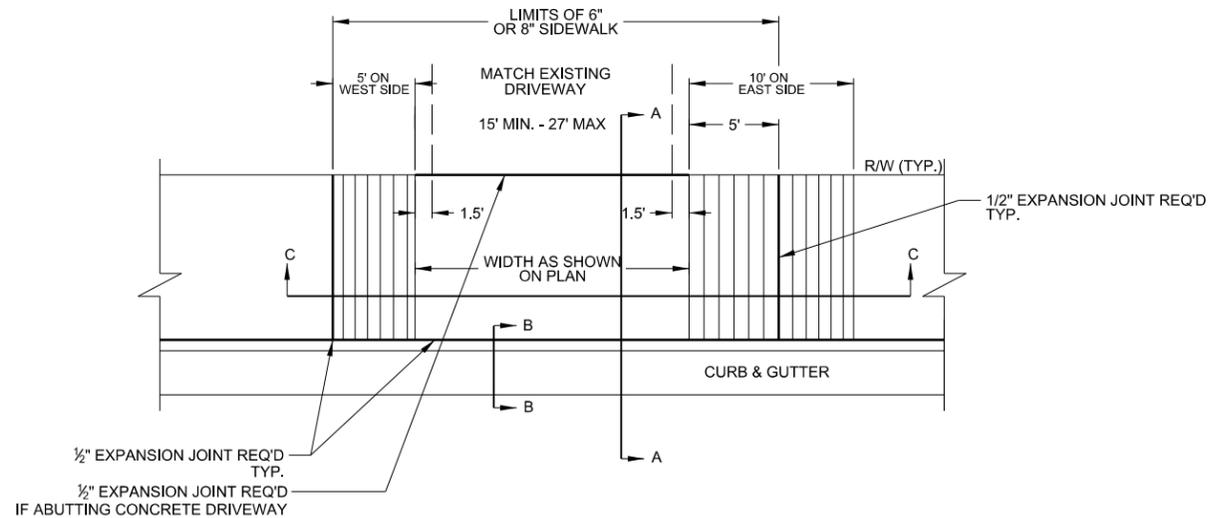


SECTION A-A



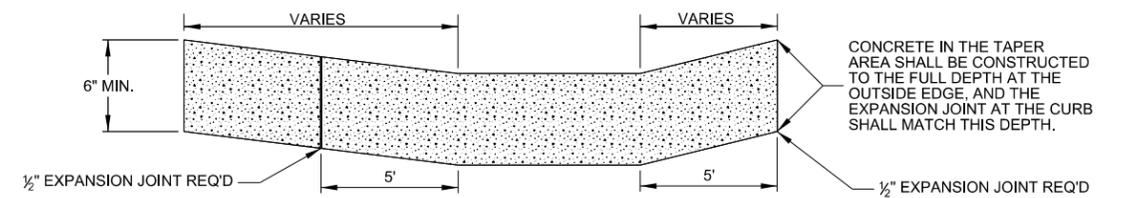
SECTION B-B

DRIVE-OVER CURB



ENTRANCE DETAIL (PE'S & CE'S)
CURB & GUTTER WITH CONCRETE SIDEWALK
2ND STREET (CENTRAL - MAPLE)

NOTE: THE EXACT LOCATION & WIDTHS OF ENTRANCES TO BE DETERMINED IN THE FIELD BY THE ENGINEER.



SECTION C-C
DRIVEWAY APPROACH TAPER

PROJ. NO. 312124

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
 CITY OF MARSHFIELD, WISCONSIN

CONCRETE ENTRANCE
DETAIL

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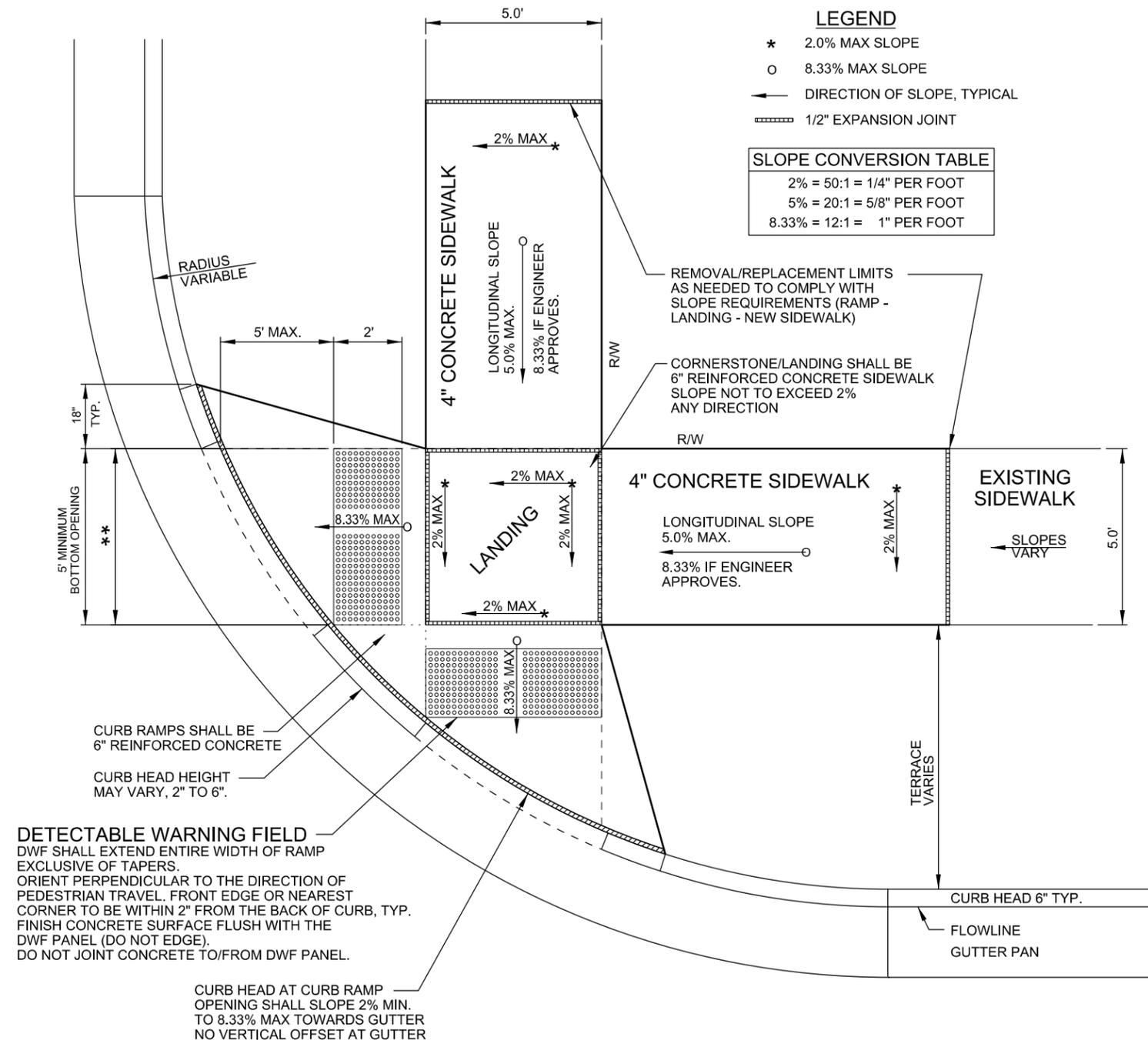
LEGEND

- * 2.0% MAX SLOPE
- o 8.33% MAX SLOPE
- ← DIRECTION OF SLOPE, TYPICAL
- ▬ 1/2" EXPANSION JOINT

SLOPE CONVERSION TABLE

2%	= 50:1 = 1/4" PER FOOT
5%	= 20:1 = 5/8" PER FOOT
8.33%	= 12:1 = 1" PER FOOT

** EAST & WEST 2ND STREET 4' WIDE DWF
 OAK AVENUE 5' WIDE DWF
 1ST & CEDAR 5' WIDE DWF



TYPE 2 CURB RAMP
DETAILED PLAN VIEW

DETECTABLE WARNING FIELD
 DWF SHALL EXTEND ENTIRE WIDTH OF RAMP EXCLUSIVE OF TAPERS. ORIENT PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL. FRONT EDGE OR NEAREST CORNER TO BE WITHIN 2" FROM THE BACK OF CURB, TYP. FINISH CONCRETE SURFACE FLUSH WITH THE DWF PANEL (DO NOT EDGE). DO NOT JOINT CONCRETE TO/FROM DWF PANEL.

CURB HEAD AT CURB RAMP OPENING SHALL SLOPE 2% MIN. TO 8.33% MAX TOWARDS GUTTER. NO VERTICAL OFFSET AT GUTTER.

PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION CITY OF MARSHFIELD, WISCONSIN
CURB RAMPS TYPES 2 DETAIL

PLOTTED ON: 3/11/2016

**CITY OF MARSHFIELD
STANDARDS FOR REPAIR OF STREET PAVEMENTS**

I. All Pavement Repairs

- All work and materials shall comply with the City of Marshfield Standard Specifications for Public Works Construction (current year edition, available on the City web site, [http://ci.marshfield.wi.us/public works/files/spec.pdf](http://ci.marshfield.wi.us/public%20works/files/spec.pdf)), Concrete/Pavement Repair and Replacement detail drawings, and these standards; and shall be the responsibility of the prime contractor or permittee.
- Backfill material shall be suitable native material (typically clay) compacted in lifts.
- Pavement, base and subbase materials shall be replaced in-kind. Match existing thicknesses of base and pavement if the existing thicknesses exceed the minimum thicknesses as detailed for asphalt or concrete pavements.
- Roadway underdrains, if encountered shall be repaired in-kind (including pipe, fabric, media, etc.).
- Longitudinal joints shall be parallel to the centerline of the travelled way, but shall not be located in a wheel path. Transverse joints shall be perpendicular to longitudinal joints. Skewed joints will only be allowed if approved by the City Engineer.
- All repaired surface areas shall be flush with existing pavements and provide a smooth ride along with proper drainage. Repair areas that do not satisfy these requirements shall be removed and replaced.
- Seal all new joints within the repair area, and perimeter joints between the repair area and existing pavement. Reseal existing joints beyond the repair area if disturbed by construction. Completely fill the joint with hot-pour elastic sealant.
- Re-establish all pavement markings removed within the repair area, and beyond if disturbed by construction. Pavement markings shall be repainted in-kind (i.e. existing epoxy/preformed plastic/latex pavement markings shall be replaced with new epoxy/preformed plastic/latex pavement markings).
- Roadway shoulders shall be restored if within the repair area or disturbed by construction. Shouldering material shall be replaced in-kind (i.e. paved asphalt/recycled asphalt millings/gravel shall be replaced with paved asphalt/recycled asphalt millings/gravel).

II. Concrete Pavement

A. Sawing

- Saw existing concrete pavement, full depth.
- Minimize over-sawing into adjacent pavements/panels. Do not oversaw beyond the repair area unless the saw blade is within an existing joint.
- If existing pavement is 5 years old or less, then saw/remove full panel(s), existing joint to existing joint.
- If existing pavement is 6 years old or older, then saw as follows:
 - Provide 6' minimum distance between an existing joint or crack and the proposed saw cut for the repair area.
 - Repair area shall be at least 6' for both longitudinal and transverse directions.
 - Rule of thumb: Don't take anything less than 6' and don't leave anything less than 6'.
 - Saw to remove defective or spalling (existing) joints.

B. Chipped Joints

- Minimize the possibility for joints or sawed edges to become chipped or damaged through utilization of secondary saw cuts and careful removal (excavation, backfilling, grading) procedures.
- Chips 1" or less horizontally shall be repaired unless the existing street pavement joints are spalled/widened to this degree.
- Chips between 1" and 2" horizontally may be repaired if existing street pavement joints are spalled/widened to this degree. If, in the opinion of the City Engineer, repairing the chip would be detrimental to the street as compared to the general condition of said street pavement, then re-saw the joint/edge, for the entire length ("Boxing-out" around the chip is not allowed).
- Chips larger than 2" horizontally will require re-sawing the joint/edge for the entire length.
- Joints/sawed edges with multiple chips will typically require re-sawing the joint/edge for the entire length.
- Use VersaSpeed as manufactured by the Euclid Chemical Company for repairing chipped concrete. Follow the manufacturer's installation directions for use.
- Note: Resawing may substantially increase the size of the repair, as necessary to comply with the saw cut location requirements.

C. Minimum Thicknesses

- Gravel base shall not be less than 6", compacted.
- Concrete pavement shall not be less than 8".

D. Dowel Bars

- All transverse joints shall be doweled, unless the thickness of the existing concrete is less than 7", thence tie bars shall be installed.
- Dowel bars shall be 1-1/4" x 18", Epoxy Coated Steel.
- When drilled into existing pavement, drill 1-3/8" x 9" holes, spaced 15" on-center, and anchored with an epoxy.
- When set into new pavement, use baskets with bars spaced 12" on-center.

E. Tie Bars

- All longitudinal joints shall be reinforced with pavement ties.
- When drilled into existing pavement, drill (1/8" larger than bar) 6" deep and use No. 6 Epoxy Coated Rebar, 12" long, spaced 30" on-center, and anchored with an epoxy.
- When set into new pavement, use No. 4 Epoxy Coated Rebar, 24" long, spaced 30" on-center.

F. Ready Mix Concrete

- Concrete mix shall be from an approved ready mix concrete supplier.
- Design of the mix shall comply with current City of Marshfield Standard Specifications for Public Works Construction, Section 10, and modifications thereof. Air entrainment and Type II cement are required.
- Use of 9-bag or Special High Early Strength mixes is not allowed.
- Use of chloride or accelerating admixtures to increase early strength development or decrease set time is not allowed.
- Preparation, forming, handling, placing, finishing, curing and protecting shall comply with the City's Standard Specifications. Curing compound shall be Tri-Kote 26, or approved equal, and shall be spray applied.
- Open to traffic after concrete has attained 3000 psi compressive strength as verified through cylinder testing (arterial and collector streets) or equivalent curing days for other locations.

III. Asphalt Pavement

- Asphalt pavement may be sawed before or after excavation, however, the edge(s) of existing asphalt pavement bounding the repair area must be vertical and undamaged when permanent repairs are made.
- Minimum thicknesses for asphalt pavement repairs shall be not less than 9" of gravel (compacted) and not less than 3" of asphalt.
- Asphalt repair patches for locations within the travelled way of collector and arterial streets; and all other streets of which the surface is 5 years old or less, shall be at least 10' wide (transverse dimension) and 10' long as a minimum (allows placement of asphalt by a paver).
- Hot mix asphalt for streets, alleys, driveways, etc. shall be placed and compacted in lifts.
- Damage to existing pavement beyond the excavation must be repaired as part of the patch. Damage may include cracking, separation, lifted mat, scratches, gouges, imprints, etc.
- Asphalt surface treatments such as chip seal treatment, slag seal treatment, coat tar or asphalt emulsion sealant, etc. shall be restored where disturbed by construction.

IV. Asphalt Overlaid on Concrete Base

- Remove all broken, damaged or unsound concrete. Full depth sawing of the concrete pavement is not required.
- Transverse joint reinforcement: Use drilled tie bars, No. 6 x 12", spaced 12" on-center.
- Longitudinal joint reinforcement: Use drilled tie bars, No. 6 x 12", spaced 30" on-center.
- If brick pavers are found underlying the asphalt surface, then remove all loose bricks and pour concrete base against remaining stable bricks (reinforcement or ties not required).
- All other requirements for Concrete Pavement shall apply.
- Saw and remove asphalt beyond the base concrete repair area.
- Location of asphalt joints shall comply with requirements for asphalt pavement.
- All other requirements for Asphalt Pavement shall apply.
- Note: Curb and gutter repair shall be done such that the pan will be overlaid with asphalt, however, the curb head shall remain exposed (including depressed curb head through driveways).

V. Subsurface Utility Excavation (SUE)/Pothing

- Use air (vacuum) within pavement structure. Use air or water (jetting) in other R/W areas beyond the pavement structure.
- Full depth core saw existing pavement, 12" diameter round, typical. Remove and save the 'core'.
- Provide/use a temporary protective steel ring to protect the edge of the opening. Provide/use a temporary round plate (with skirt) to protect opening if subjected to traffic prior to pavement repair.
- Match existing thicknesses of bedding/cover, base and surface materials.
- If suitable for reuse, reinstall the 'core' in the opening at the original alignment/orientation, using approved non-shrink grout placed into the opening and forced to the surface (filling annular space) upon placement/reinsertion of the 'core'.
- If the 'core' cannot be reused, then concrete repairs shall comply with all requirements for concrete pavement except as discussed herein. The joint of the new concrete patch shall be tied to existing concrete using #4 Epoxy Coated Rebar, 8" long, space 120° apart. Clean the vertical surface of existing concrete and prepare using a bonding agent. Concrete shall be ready mix or an approved high quality, air entrained bagged mixture. Finish, cure and protect as required for Concrete Pavement.
- Asphalt repairs shall comply with all requirements for Asphalt Pavement except as discussed herein. The joint of the new asphalt patch shall be adhered/tacked to the existing asphalt. Asphalt material shall be Hot Mix Asphalt or an approved mixture such as Quikrete Commercial Grade High Performance Blacktop Repair.

{End of Standards}

Rev. 1/14

PROJ. NO.

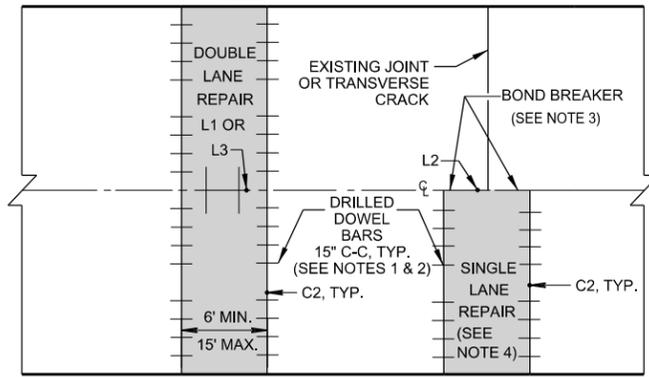
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

**CONCRETE /PAVEMENT
REPAIR & REPLACEMENT
(STREET REPAIR STANDARDS)
SHEET 1 OF 3**

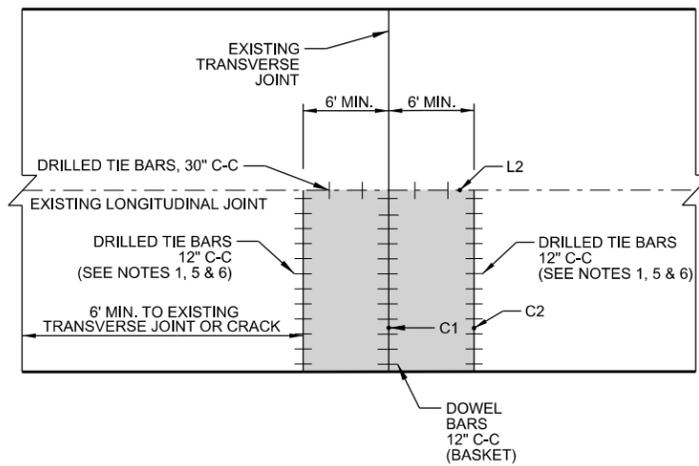
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GENERAL NOTES

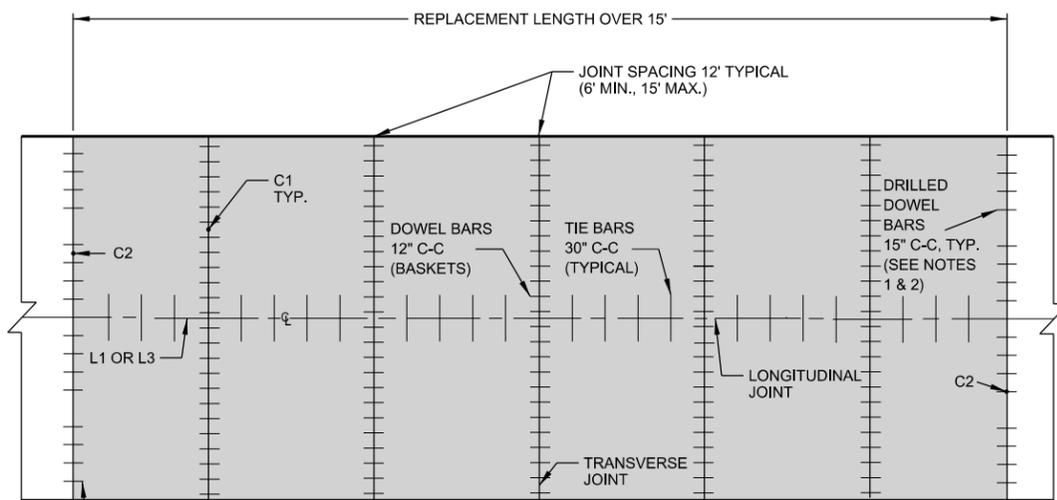
- DO NOT OVERSAW BEYOND THE REPAIR AREA UNLESS THE SAW BLADE IS WITHIN AN EXISTING JOINT.
- DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.
- CONCRETE PAVEMENT REPAIRS OF EXISTING NON DOWELED CONCRETE PAVEMENTS SHALL BE DOWELED.
- ALL NEW AND EXISTING JOINTS SHALL BE FILLED/SEALED.
- 1. ANCHOR DOWEL AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- 2. APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- 3. USE AN ENGINEER-APPROVED BOND BREAKER (0.5MM FREE STANDING PLASTIC SHEETING, RELEASE AGENT, CURING COMPOUND, 30LB TAR PAPER, ETC.) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
- 4. SINGLE LANE JOINT REPAIR PATCH WITH OFFSET TRANSVERSE JOINT NOT ALLOWED FOR REPAIR OF UTILITY CUTS.
- 5. PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.
- 6. RESTRICT THE POTENTIAL FOR JOINT MOVEMENT WHEN INTRODUCING NEW TRANSVERSE JOINTS THAT DO NOT EXTEND ACROSS THE ENTIRE WIDTH OF PAVEMENT.
- 7. DRILLED TIE BARS ARE REQUIRED WHERE LONGITUDINAL EDGES OF THE REPAIR/REPLACEMENT ARE ABOUT CONCRETE CURB & GUTTER OR PAVEMENT.



CONCRETE PAVEMENT JOINT REPAIR/REPLACEMENT

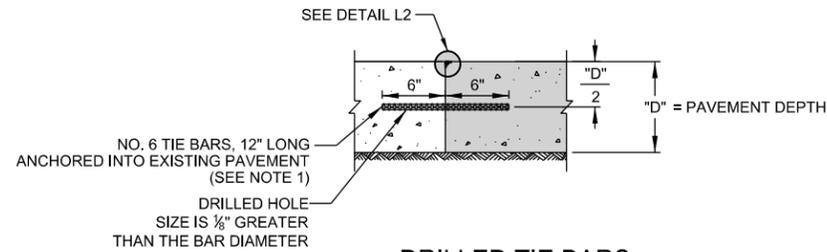


SINGLE LANE CONCRETE PAVEMENT REPAIR



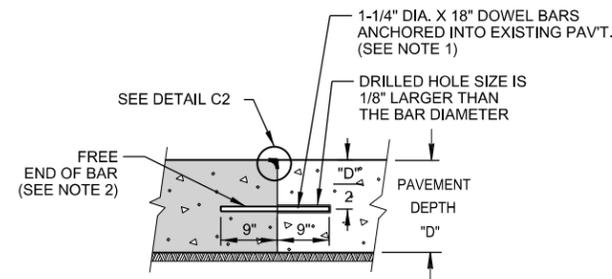
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

DRILLED DOWEL BARS 15" C-C, TYP. (SEE NOTES 1 & 2)



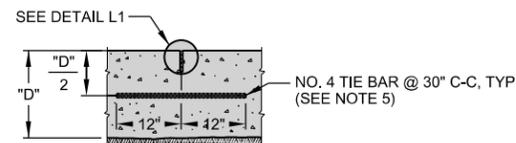
DRILLED TIE BARS

(DRILLED INTO EXISTING CONCRETE PAVEMENT)



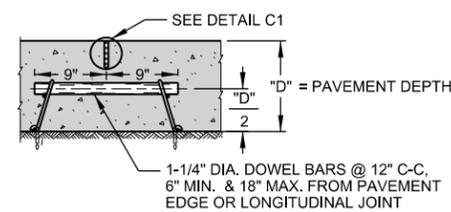
DRILLED DOWEL BARS

(DRILLED INTO EXISTING CONCRETE PAVEMENT)



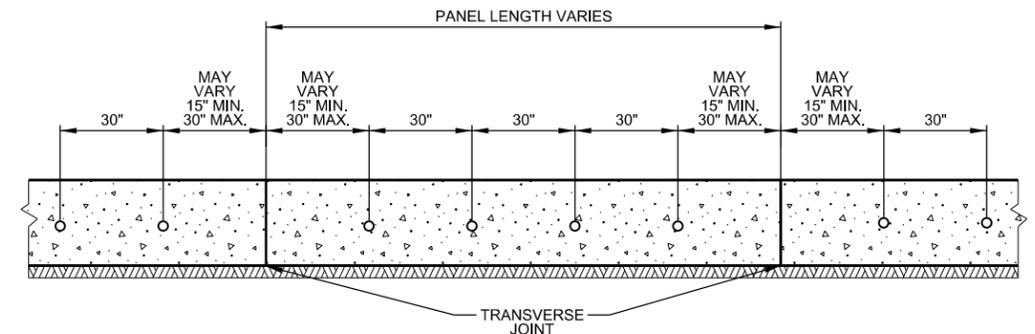
LONGITUDINAL/TIED JOINT

(WITHIN NEW PAVEMENT/PATCH)



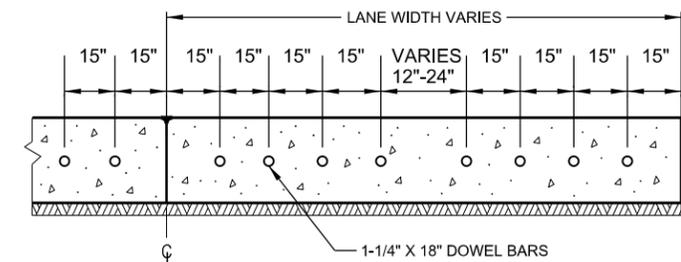
TRANSVERSE/DOWELED JOINT

(WITHIN NEW PAVEMENT/PATCH)



TIE BAR SPACING

(DRILLED INTO EXISTING PAVEMENT OR PLACED WITHIN NEW PAVEMENT/PATCH)



DRILLED DOWEL BAR SPACING

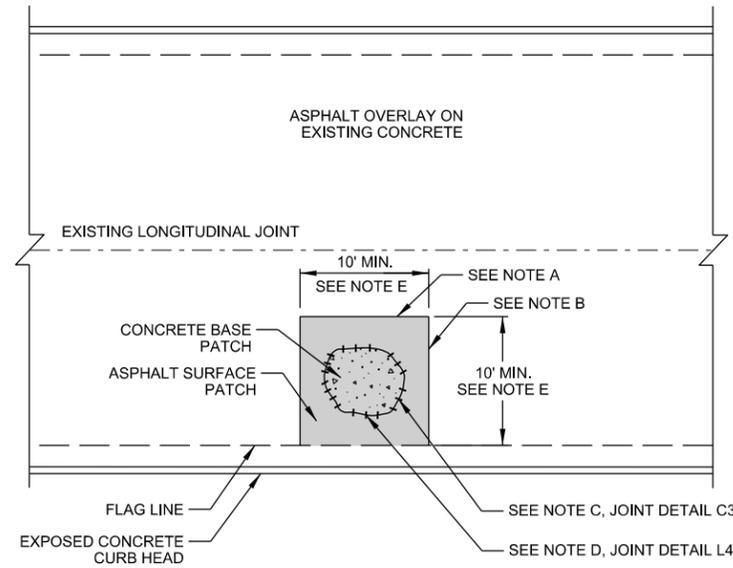
(DRILLED INTO EXISTING PAVEMENT)

PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

**CONCRETE PAVEMENT
REPAIR & REPLACEMENT
(STREET REPAIR STANDARDS)
SHEET 2 OF 3**

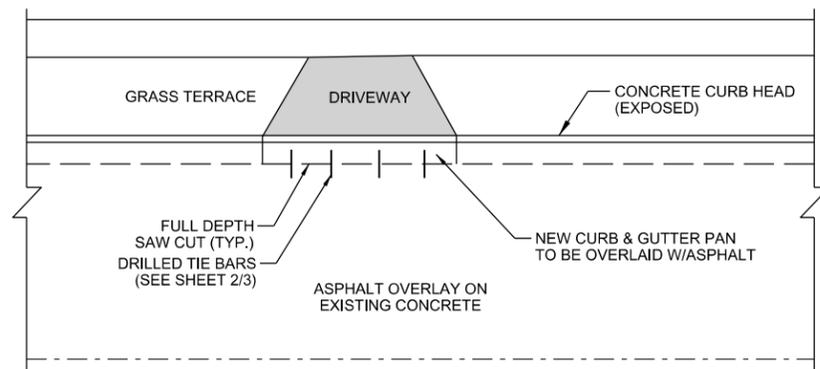
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ASPHALT OVERLAY ON CONCRETE BASE (REPAIR)

NOTES:

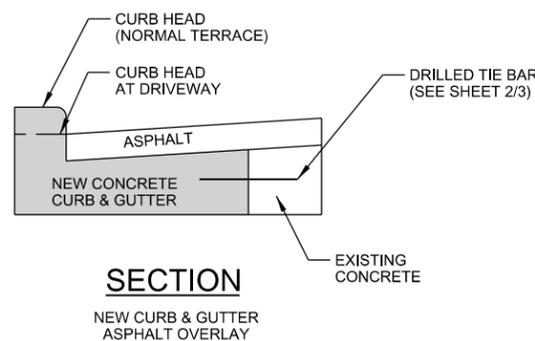
- A. LONGITUDINAL JOINTS SHALL BE AT THE $\frac{1}{4}$ OR PARALLEL WITH THE $\frac{1}{4}$ AT THE MIDDLE OR EDGE OF THE LANE/TRAVELED WAY. LONGITUDINAL JOINTS SHALL NOT BE AT A WHEEL PATH.
- B. TRANSVERSE JOINTS SHALL BE ALIGNED WITH OR AT LEAST 6' FROM AN EXISTING TRANSVERSE JOINT OR CRACK.
- C. TRANSVERSE JOINT REINFORCEMENT SHALL BE DRILLED TIE BARS (NO. 6x12" SPACED 12" C-C, SEE SHEET 2/3)
- D. LONGITUDINAL JOINT REINFORCEMENT SHALL BE DRILLED TIE BARS (NO. 6x12" SPACED 30" C-C, SEE SHEET 2/3)
- E. MINIMUM DIMENSIONS FOR ASPHALT REPAIRS AS SHOWN SHALL BE REQUIRED ON COLLECTOR AND ARTERIAL STREETS; AND RESIDENTIAL STREETS WITH ASPHALT SURFACE AGE OF 5 YEARS OR LESS.



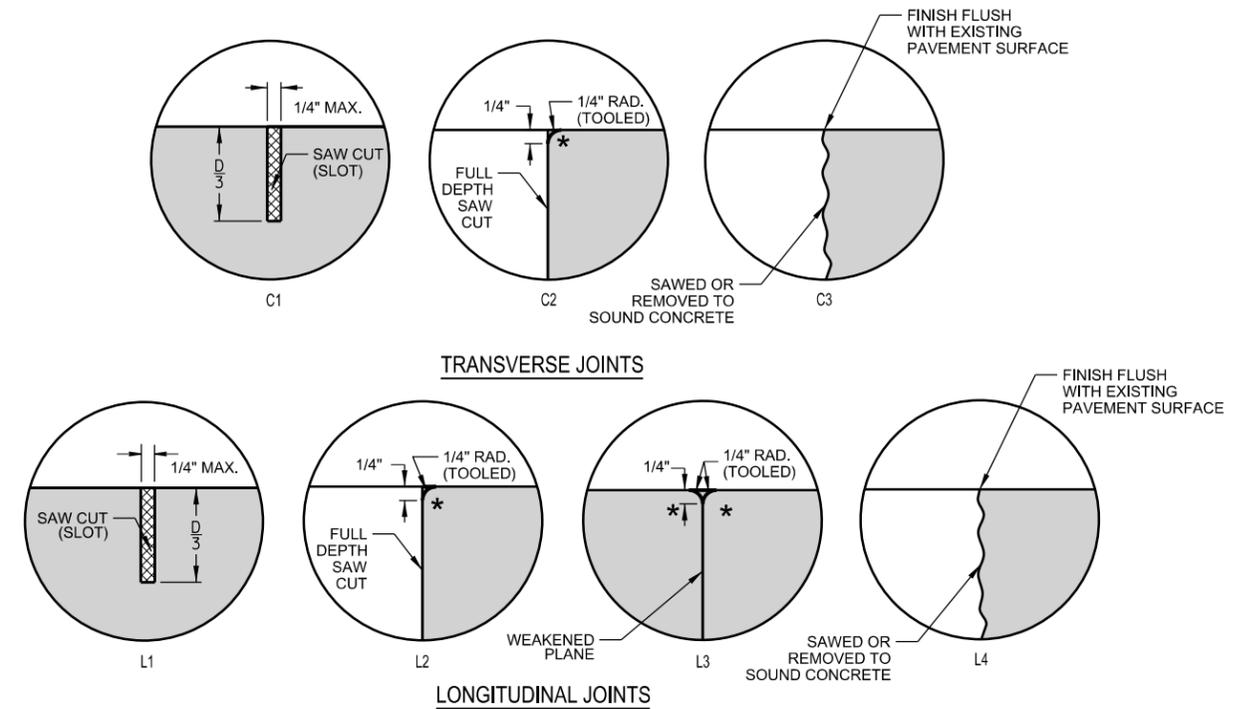
CURB & GUTTER ON ASPHALT OVERLAID CONCRETE PAVEMENT

NOTES:

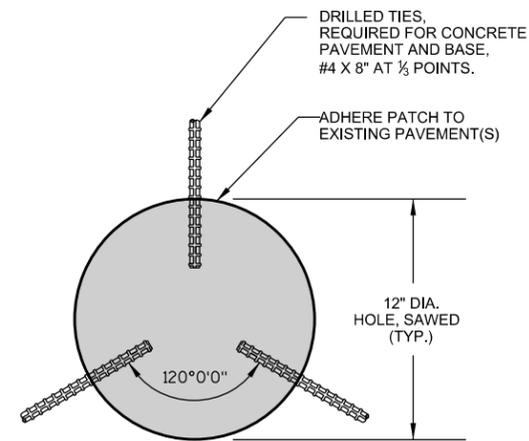
- CURB OPENINGS FOR NEW DRIVEWAYS MAY BE CONSTRUCTED BY SAWING OFF THE CURB HEAD (IF PROFESSIONALLY DONE BY TRAINED PERSONNEL USING PROPER EQUIPMENT) IN LIEU OF REMOVAL AND REPLACEMENT.
- NEW CONCRETE CURB & GUTTER PAN SHALL NOT BE EXPOSED UNLESS APPROVED BY THE CITY ENGINEER.



- ☒ HOT-POUR ELASTIC SEALANT REQUIRED
- * TROWEL/EDGE NEW CONCRETE TO CREATE A RESERVOIR FOR JOINT SEALANT



CONCRETE PAVEMENT JOINT DETAILS

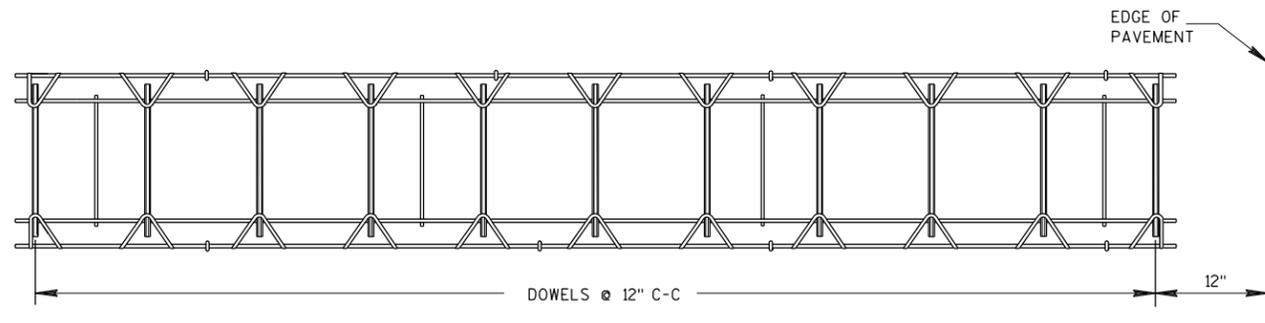


**S.U.E./POTHOLE REPAIR
(CONCRETE PAVEMENT/BASE)**

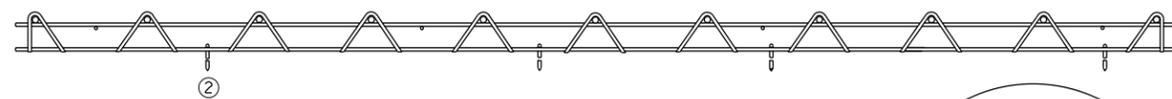
PROJ. NO.

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN
**CONCRETE PAVEMENT JOINT DETAILS &
ASPHALT OVERLAY/ POTHOLE REPAIRS
(STREET REPAIR STANDARDS)**
SHEET 3 OF 3

PLOTTED ON: 3/11/2016 12:50:24 PM

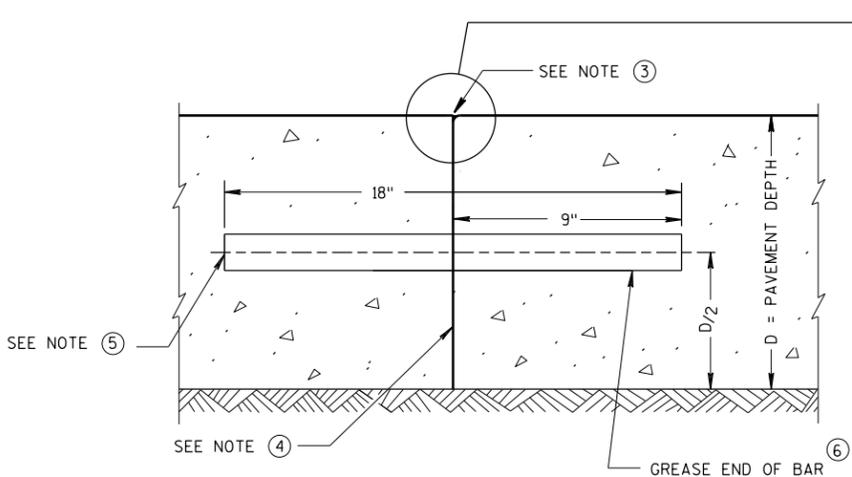
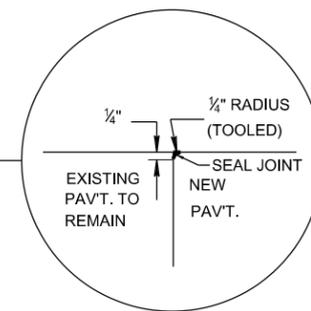


PLAN VIEW

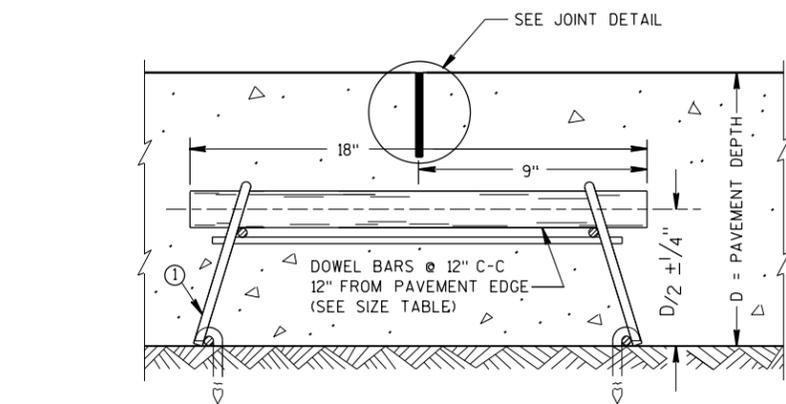


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY



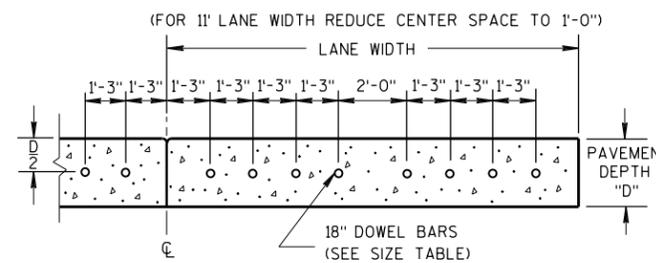
TRANSVERSE CONSTRUCTION JOINT



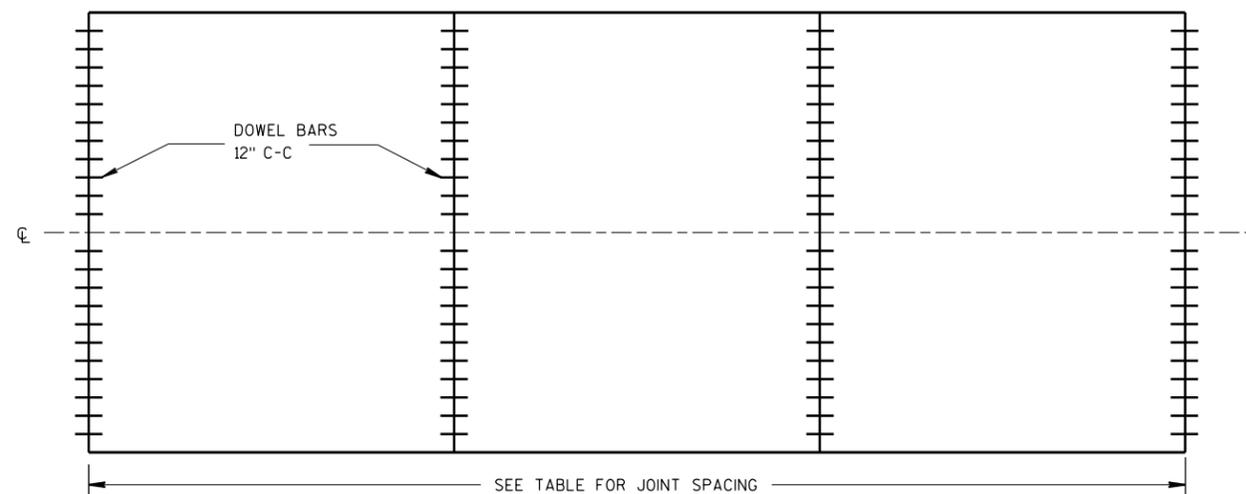
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

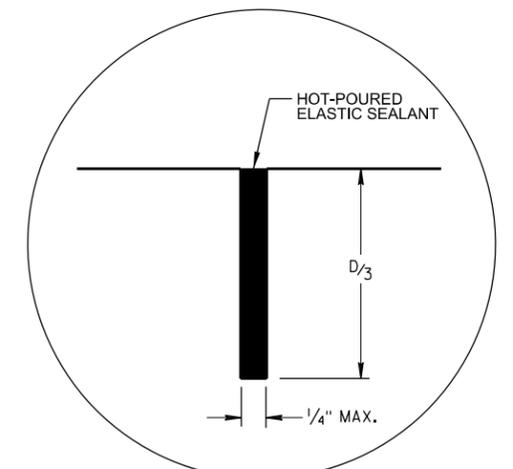
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

- OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO DRILLED DOWEL BAR CONSTRUCTION JOINT DETAIL.
- APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

PROJ. NO.

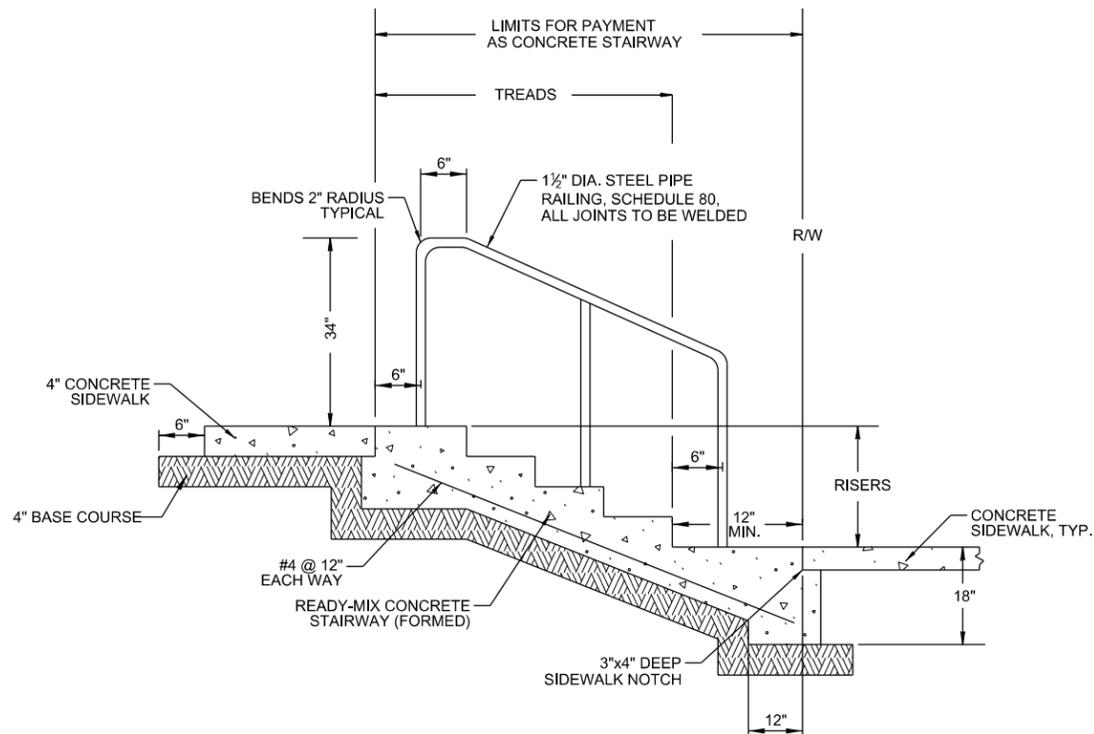
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

URBAN DOWELED
CONCRETE PAVEMENT
(WISDOT 13C-13-8)

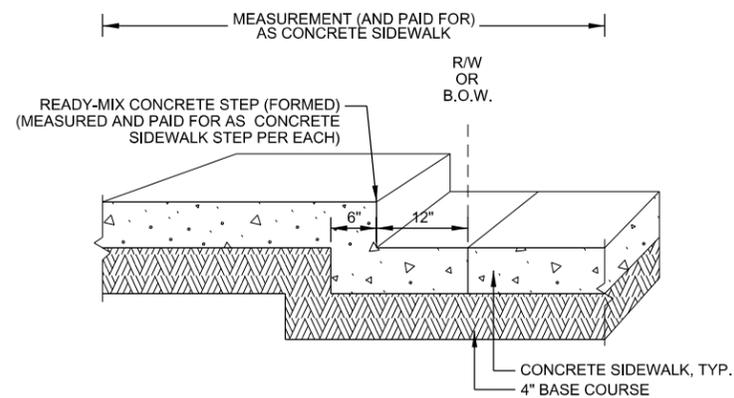
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STEP AND STAIRWAY SPECIFICATIONS

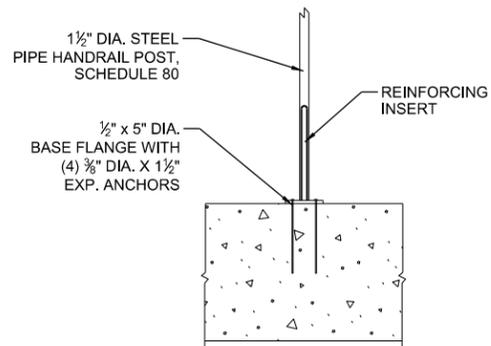
- RISER HEIGHT SHALL BE 4" MIN., 8" MAX.
- TREAD DEPTH SHALL BE 9" MIN.
- RISER/TREAD UNIFORMITY- THE GREATEST RISER HEIGHT SHALL NOT EXCEED THE SMALLEST RISER HEIGHT BY MORE THAN $\frac{3}{8}$ ". THE GREATEST TREAD DEPTH SHALL NOT EXCEED THE SMALLEST TREAD DEPTH BY MORE THAN $\frac{3}{8}$ ".
- WIDTH OF CONCRETE SIDEWALK STAIRWAY SHALL BE 36" MIN. (MATCH EXISTING SIDEWALK IF WIDER)
- LANDINGS: DEPTH AT BOTTOM OF THE STAIRWAY SHALL BE 12"; DEPTH AT THE TOP OF THE STAIRWAY SHALL BE 36"; WIDTH SHALL BE 36" MIN. AND SLOPED 2% OR LESS IN ANY DIRECTION.
- HANDRAILS ARE REQUIRED FOR STAIRWAYS WITH MORE THAN 3 RISERS.
- HANDRAIL HEIGHT SHALL BE 34" (NOSE AT RISER TO TOP OF RAILING; ALLOWABLE RANGE IS 30" MIN. & 38" MAX.)
- HANDRAIL SUPPORTS (VERTICAL) SHALL NOT SPAN MORE THAN 5' (HORIZONTAL). ADD MID SUPPORT AS NECESSARY.
- BASIS OF SPECIFICATIONS: STATE OF WISCONSIN, UNIFORM DWELLING CODE, CHAPTER COMM 21.04



TYPICAL STAIRWAY SECTION
(TWO OR MORE STEPS)



TYPICAL STEP SECTION
(ONE STEP)



PIPE RAILING BASE DETAIL

PLOTTED ON: 3/11/2016

PROJ. NO.

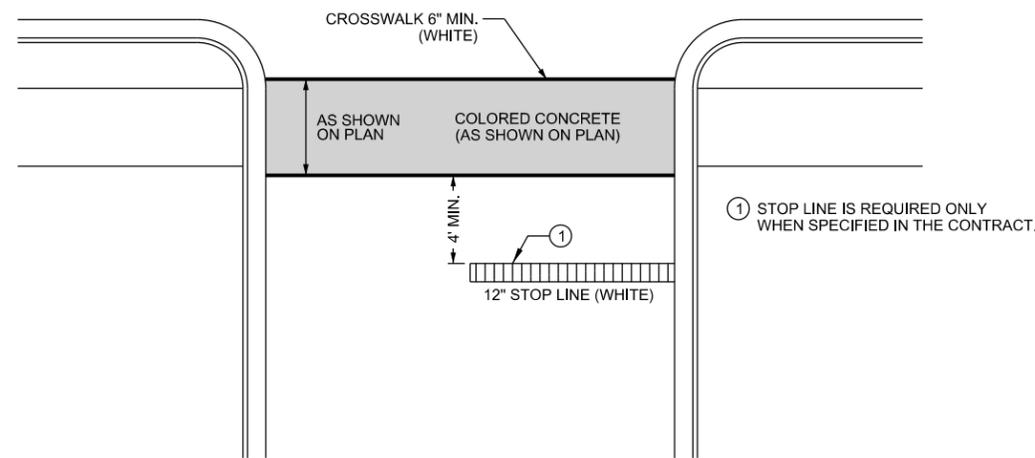
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

CONCRETE STEP AND STAIRWAY DETAILS

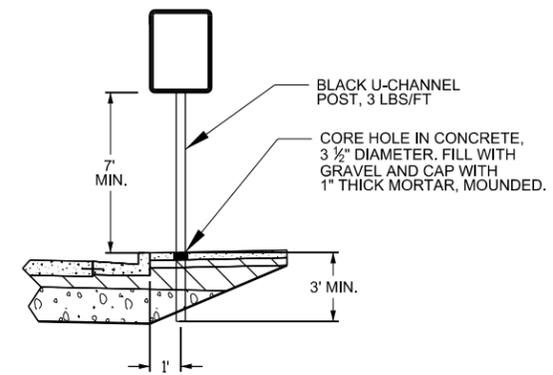
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED.

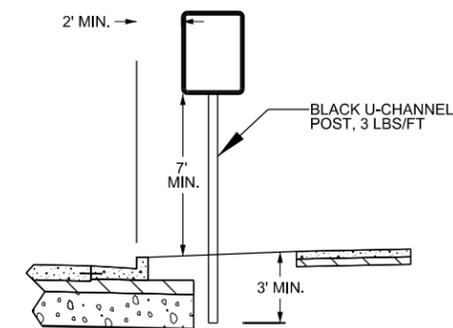


STOP LINE AND CROSSWALK DETAIL



NOTE: SEE TYPICAL SECTIONS FOR UNDERLYING MATERIALS

SIGN PLACEMENT DETAIL



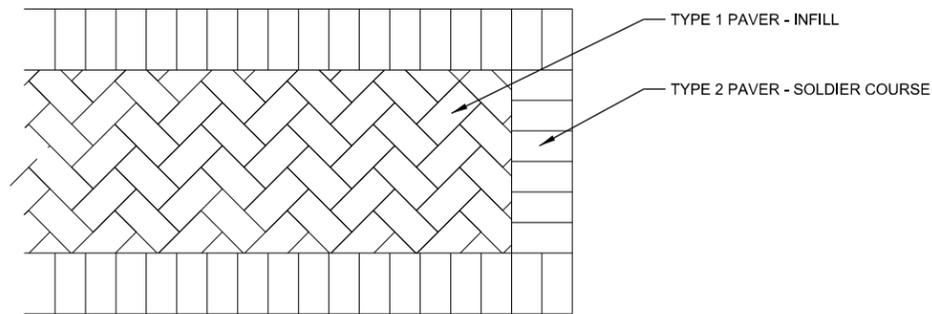
SIGN PLACEMENT DETAIL
TERRACED AREA

PROJ. NO.

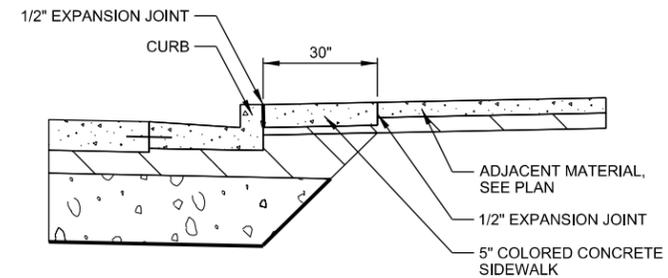
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

PAVEMENT MARKING
MAINLINE, CROSSWALKS,
AND STOP BARS

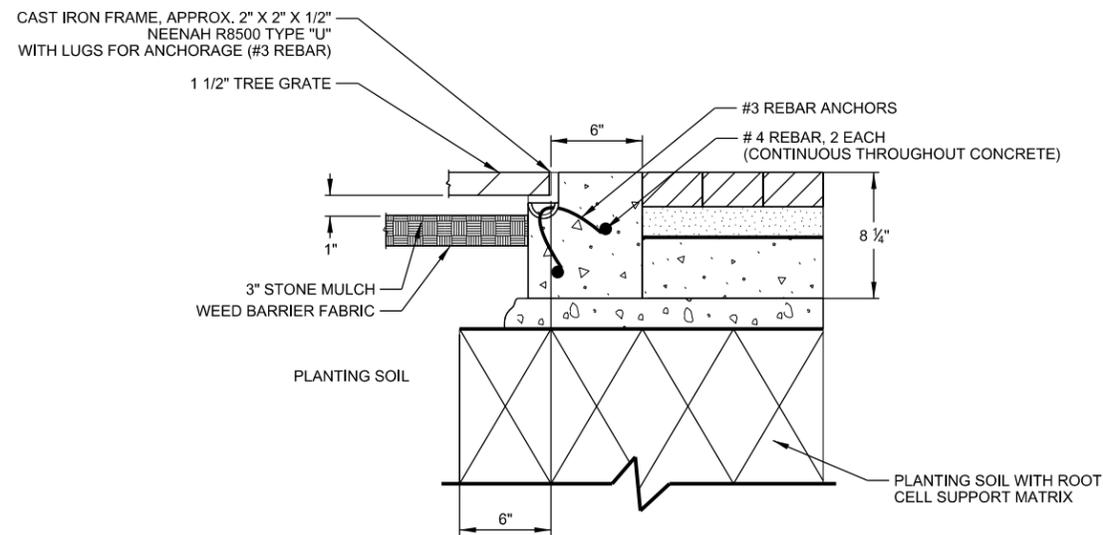
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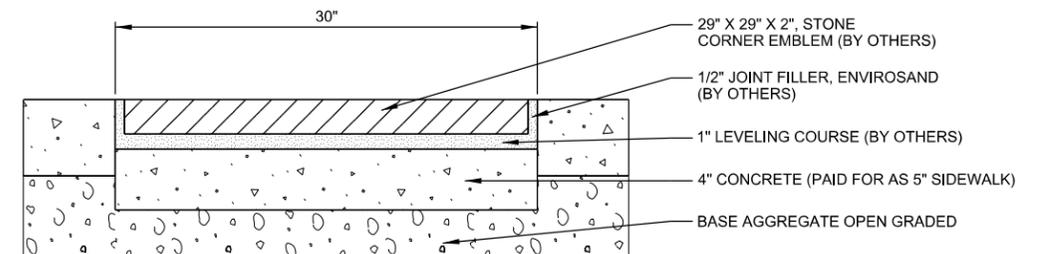
BRICK PAVER LAYOUT
NTS



COLORED CONCRETE BAND



TREE GRATE SUPPORT DETAIL



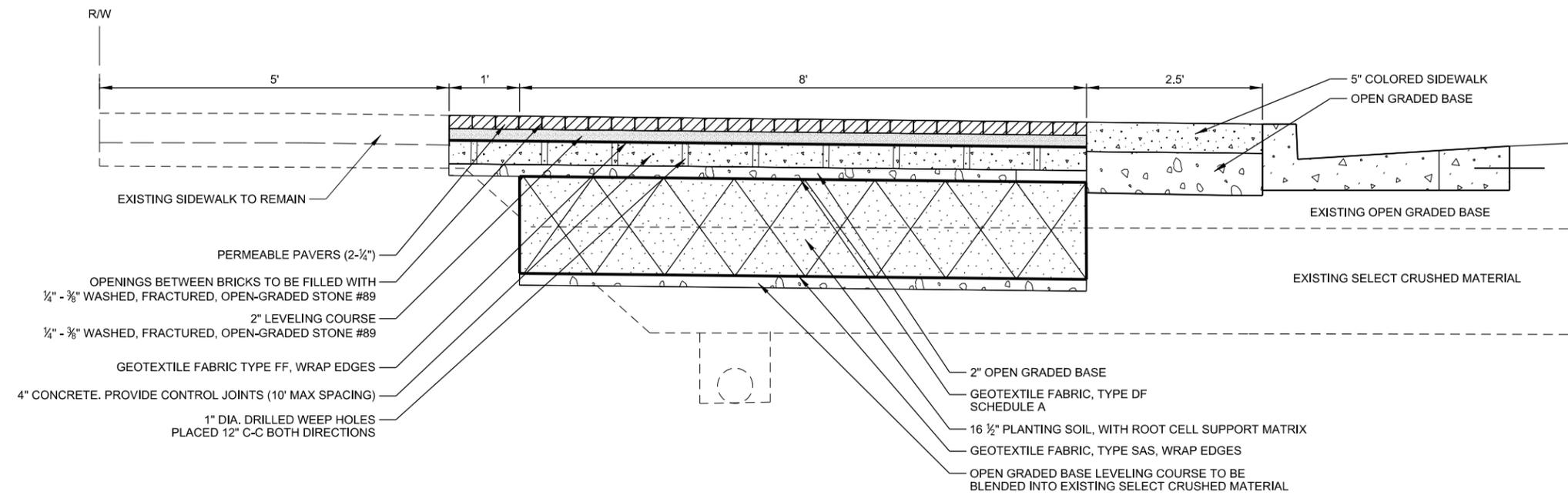
CORNER EMBLEM DETAIL

PROJ. NO.

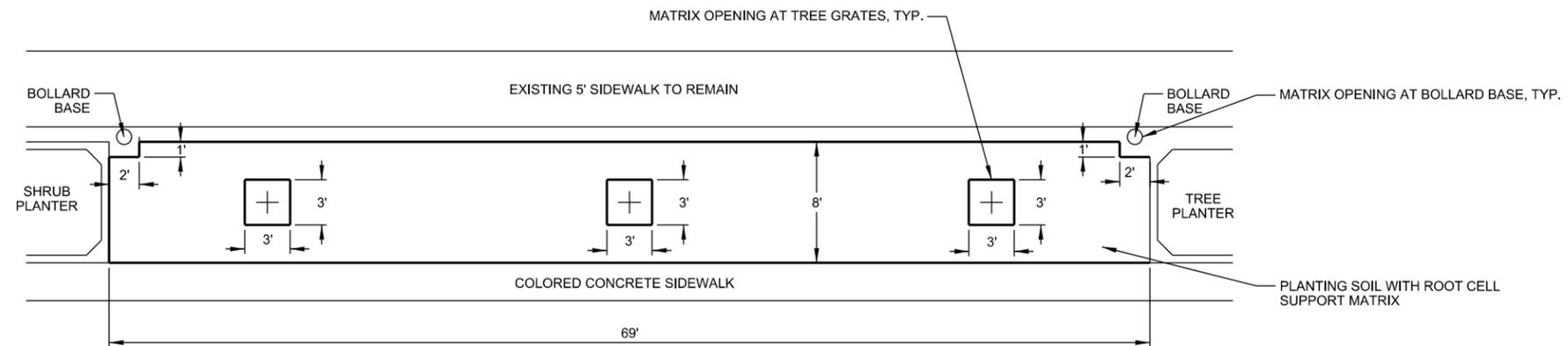
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

LANDSCAPE
DETAILS

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**PERMEABLE PAVERS (OVER CONCRETE) OVER PLANTING SOIL
(W. 2ND STREET AT TREE GRATE AREAS)**



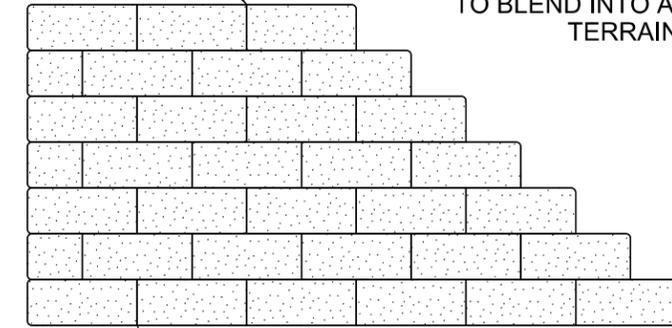
**LAYOUT PLAN
PLANTING SOIL/ROOT CELL SUPPORT MATRIX**

PROJ. NO.
DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION CITY OF MARSHFIELD, WISCONSIN
LANDSCAPE DETAILS

PLOTTED ON: 3/11/2016 12:50:35 PM

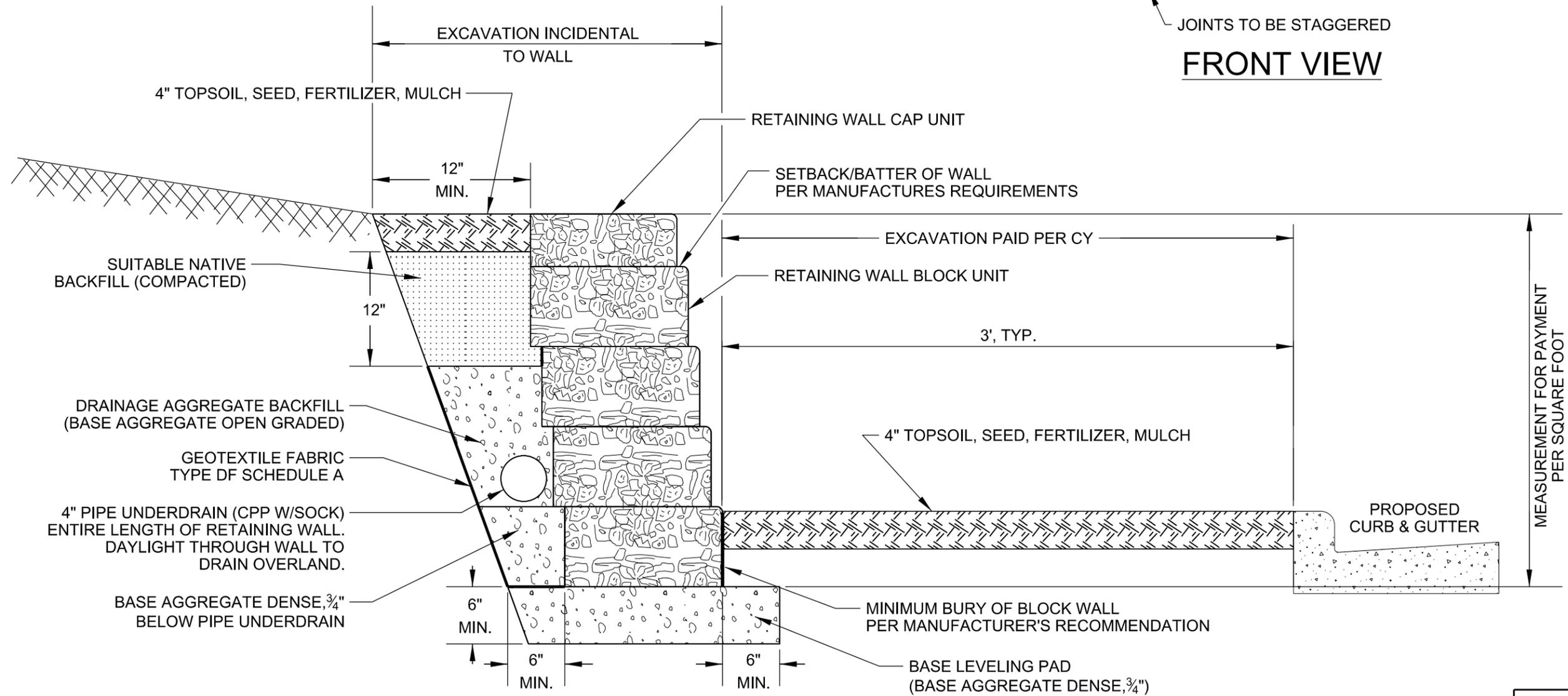
COURSES SHALL BE LEVEL

SLOPE TERRAIN AS NECESSARY TO BLEND INTO ADJACENT TERRAIN



JOINTS TO BE STAGGERED

FRONT VIEW



NOT TO SCALE

PROJ. NO. 312238

DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
CITY OF MARSHFIELD, WISCONSIN

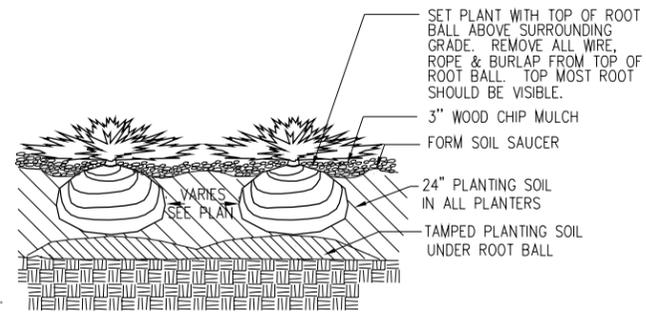
GRAVITY RETAINING WALL

PLOTTED ON: 3/11/2016 12:50:35 PM

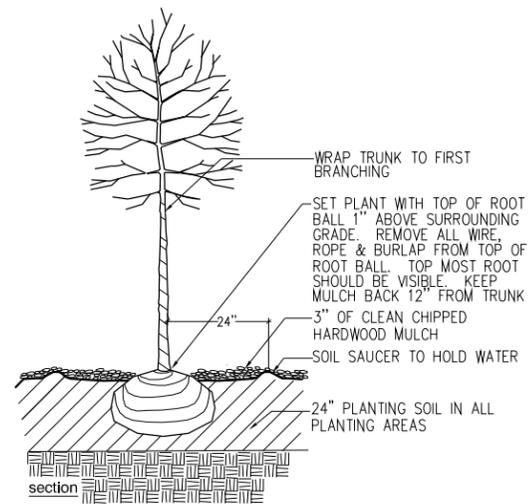
PLANTING SCHEDULE

Quantities shown are for the whole project

key	common name/botanical name	size	no.	root
A	Red Oak <i>Quercus rubra</i>	4"	2	b & b
B	'Autumn Gold' Ginkgo <i>Ginkgo biloba 'Autumn Gold'</i>	4"	2	b & b
C	'Skyline' Honeylocust <i>Gleditsia triacanthos 'Skyline'</i>	5"	3	b & b
D	Swamp White Oak <i>Quercus bicolor</i>	5"	2	b & b
E	Prairiefire Crabapple <i>Malus 'Prairiefire'</i>	2.5"	4	b & b
F	Ivory Silk Japanese Tree Lilac <i>Syringa reticulata 'Ivory Silk'</i>	2.5"	3	b & b
G	Autumn Brilliance Serviceberry <i>Amelanchier grand. 'Autumn Brilliance'</i>	8'	6	b & b multi stem
H	'Skyrocket' Juniper <i>Juniperus scopulorum 'Skyrocket'</i>	36"	19	b & b
I	Black Chokeberry <i>Aronia melanocarpa var. elata</i>	#5	33	container
J	Neon Flash Spirea <i>Spiraea japonica 'Neon Flash'</i>	#3	27	container
K	Little Devil Ninebark <i>Physocarpus opulifolius 'Little Devil'</i>	#5	36	container
L	Seagreen Juniper <i>Juniperus chinensis 'Seagreen'</i>	#5	31	container
M	Broadmoor Juniper <i>Juniperus sabinia 'Broadmoor'</i>	#5	71	container
N	Stella De Oro Daylily <i>Hemerocallis 'Stella de Oro'</i>	#1	82	container
P	'Pardon Me' Daylily <i>Hemerocallis 'Pardon Me'</i>	#1	57	container
R	'Red Volunteer' Daylily <i>Hemerocallis 'Red Volunteer'</i>	#1	18	container
S	'Goldsturm' Black Eyed Susan <i>Rudbeckia fulgida 'Goldstrum'</i>	#1	50	container
T	'Autumn Joy' Sedum <i>Sedum telephium 'Autumn Joy'</i>	#1	48	container



SHRUB PLANTING DETAIL



TREE PLANTING DETAIL



PROJECT NUMBER 312219, 312220, 352221, 316774	SHEET NO. 34
--	-----------------

PROPOSED WATER MAIN

FROM		TO		8" DI	6" DI	4" DI
STATION	LOCATION	STATION	LOCATION	LF	LF	LF
20E+07	LT. 9'	20E+26	LT. 10'	20		
20E+26	LT. 10'	21E+42	LT. 10'	116		
21E+42	LT. 10'	21E+52	LT. 10'	9		
21E+52	LT. 10'	21E+60	LT. 10'	9		
21E+60	LT. 10'	21E+65	LT. 14'	6		
21E+65	LT. 14'	21E+75	LT. 14'	10		
21E+75	LT. 14'	21E+78	LT. 10'	6		
21E+78	LT. 10'	22E+80	LT. 10'	102		
21E+42	LT. 10'	21E+42	LT. 13'		3	
21E+52	LT. 10'	21E+52	RT. 35'	45		
21E+52	RT. 35'	21E+52	RT. 38'			3
PROJECT TOTAL				323	3	3

REMOVE CONTAMINATED SOILS & INSTALL TRENCH PLUGS

STATION	LOCATION	INSTALL	REMOVE	FLUOROCARBON GASKETS, 8"
		TRENCH PLUGS EACH	CONTAMINATED SOIL TONS	
22E+26	10'	1	55	2
22E+80	10'	1	55	2
PROJECT TOTAL		2	110	4

PROPOSED VALVES AND FITTINGS

NO	STATION	LOCATION	VALVE & BOX 8" EACH	VALVE & BOX 6" EACH	TEE 8" EACH	TEE 8" X 6" EACH	REDUCER 8" X 4" EACH	45 D BEND 8" EACH	SLEEVE 8" EACH	SLEEVE 6" EACH	SLEEVE 4" EACH	8-INCH VERTICAL OFFSET EACH	CONNECT TO EXISTING WATER MAIN EACH
	20E+07	LT. 9'							1			1	1
	21E+42	LT. 10'				1							
	21E+42	LT. 13'		1						1			1
	21E+49	LT. 10'	1										
	21E+52	LT. 10'			1								
	21E+52	RT. 35'					1				1		1
	21E+55	LT. 10'	1										
	21E+60	LT. 10'						1					
	21E+65	LT. 14'						1					
	21E+75	LT. 14'						1					
	21E+78	LT. 10'						1					
	22E+80	LT. 10'							1				1
PROJECT TOTAL			2	1	1	1	1	4	2	1	1	1	4

PROPOSED WATER SERVICES

ADDRESS	STATION	LOCATION	TAP & CORP, 1" EACH	CURB STOP & BOX, 1" EACH	COPPER, 1" LF	TAP & CORP, 1-1/2" EACH	CURB STOP & BOX, 1-1/2" EACH	COPPER, 1-1/2" LF	FROST SLEEVE EACH
104 E. 2ND STREET	20E+70	RT.	1	1 (23.75' RT.)	40				1
171 S. CENTRAL AVENUE	21E+13	LT.				1	1 (17.1' LT.)	20	1
171 S. CENTRAL AVENUE	21E+42	LT.							
PROJECT TOTAL			1	1	40	1	1	20	2

6" FIRE SERVICE - PIPING & FITTINGS IN RESPECTIVE WATERMAIN QUANTITIES

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NO	CODE	SIZE		NEW PERMANENT SIGN		INSTALL SALVAGED SIGN EA	U-CHANNEL POST 12-FT, BLACK EACH	U-CHANNEL POST 16-FT, BLACK EACH	INSTALL SALVAGED POST EA	CORE DRILL FOR U-CHANNEL EACH	SPECIAL TOP BRACKET FOR U-CHANNEL POST EACH	NOTE
		IN	IN	HIPRR SF	EG SF							
West 2nd Street												
E-1	R1-1	30	X 30	-	-	1	-	-	-	-	-	-
E-2	R1-3P	18	X 6	-	-	1	-	-	-	-	-	-
1.1	R3-2	24	X 24	4.00	-	-	-	-	-	-	-	Light Pole Mounted/Hardware Supplied
E-9	R5-1	30	X 30	-	-	1	-	1	-	1	-	Clip Corners
E-3	R1-1	36	X 36	-	-	1	-	-	-	-	-	Mounted with 1.2
E-4	R1-3P	18	X 6	-	-	1	-	-	-	-	-	Mounted with 1.2
1.2	R6-7	24	X 30	5.00	-	-	-	-	-	-	-	Mounted with 1.2
E-6	R1-1	30	X 30	-	-	1	-	-	-	-	-	-
E-7	R1-3P	18	X 6	-	-	1	-	-	-	-	-	-
1.3	R3-1	24	X 24	4.00	-	-	-	1	-	-	-	Installed in Terrace
E-10	R5-1	30	X 30	-	-	1	-	1	-	1	-	Clip Corners
1.4	R1-1	36	X 36	9.00	-	-	-	-	-	-	-	Mounted with 1.7
1.5	R1-3P	18	X 6	0.75	-	-	-	-	-	-	-	Mounted with 1.7
1.6	R6-7	24	X 30	5.00	-	-	-	-	-	-	-	Mounted with 1.7
E-8	R7-108D	12	X 18	-	-	1	-	-	-	-	-	To Remain
1.7	R6-1R	36	X 12	3.00	-	-	-	-	-	-	1	Mounted with 1.13
E-12	R6-2L	18	X 24	-	-	1	-	-	-	-	-	Existing Post
E-18	R7-6	12	X 18	-	-	1	Salvaged	-	1	-	-	-
E-16	R7-108D	12	X 18	-	-	1	-	-	-	-	-	Light Pole Mounted/Hardware Supplied
1.8	R6-1L	36	X 12	3.00	-	-	Salvaged	-	1	1	-	-
1.9	R6-1R	36	X 12	3.00	-	-	Salvaged	-	1	1	-	-
E-19	R7-8A	18	X 24	-	-	1	Salvaged	-	1	-	-	-
1.10	R7-8V	18	X 9	-	1.13	-	-	-	-	-	-	Mounted with E-19
E-20	R7-8A	18	X 24	-	-	1	Salvaged	-	1	-	-	-
E-21	-	12	X 18	-	-	1	Salvaged	-	1	-	-	-
E-22	-	12	X 18	-	-	1	Salvaged	-	1	-	-	-
E-23	-	12	X 18	-	-	1	Salvaged	-	1	-	-	-
E-24	-	12	X 18	-	-	1	Salvaged	-	1	-	-	-
1.11	R7-1D	12	X 18	-	1.50	-	-	-	-	-	-	Install New Sign on Existing Post
3600-PROJECT TOTA				37	3	18	0	3	9	4	1	
East 2nd Street												
2.1	R6-1L	36	X 12	3.00	-	-	Salvaged	-	1	1	-	-
2.2	R6-1R	36	X 12	3.00	-	-	Salvaged	-	1	1	-	-
2.3	R6-1R	36	X 12	3.00	-	-	-	1	-	1	1	-
2.4	R6-2L	18	X 24	3.00	-	-	-	-	-	-	-	Mounted with 2.3
E-17	R7-108L	12	X 18	-	-	1	-	-	-	-	-	Mounted with 2.3
2.5	R6-2L	18	X 24	3.00	-	-	Salvaged	-	1	1	-	-
E-13	R7-108D	12	X 18	-	-	1	-	-	-	-	-	Light Pole Mounted/Hardware Supplied
2.6	R7-108L	12	X 18	-	1.50	-	-	-	-	-	-	Light Pole Mounted/Hardware Supplied
E-18	R1-1	36	X 36	-	-	1	-	1	-	1	-	Salvaged 14' post to Mfld Sign Shop
2.7	R6-7	24	X 30	5.00	-	-	-	-	-	-	-	Mounted with 2.9
2.8	R5-1	30	X 30	6.25	-	-	-	-	-	-	-	Mounted with 2.9
2.9	R1-1	36	X 36	9.00	-	-	-	1	-	1	-	-
2.10	R6-7	24	X 30	5.00	-	-	-	-	-	-	-	Mounted with 2.12
2.11	R5-1	30	X 30	6.25	-	-	-	-	-	-	-	Mounted with 2.12
2.12	R3-1	24	X 24	4.00	-	-	Salvaged	-	1	-	-	Installed in Terrace
2.13	R3-2	24	X 24	4.00	-	-	-	-	-	-	-	Light Pole Mounted/Hardware Supplied
2.14	R7-8A	12	X 18	1.50	-	-	Salvaged	-	1	-	-	-
2.15	R7-8V	12	X 6	0.50	-	-	-	-	-	-	-	Mounted with 2.14
2.16	R7-8A	12	X 18	1.50	-	-	1	-	-	-	-	-
3601-PROJECT TOTA				58	2	3	1	3	5	6	1	

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EARTHWORK COMPUTATIONS - OAK AVENUE							
Station	Area (SF)		Incremental Volume (CY)		Cumulative Volume (CY)		Mass Haul
	Cut	Fill	Cut	Fill	Cut	Fill	
10+00.01	14.9	0.0	0.0	0.0	0	0	0
10+25.00	8.3	0.2	10.7	0.1	11	0	11
10+50.00	7.7	0.2	7.4	0.2	18	0	18
10+56.32	9.2	0.2	2.0	0.0	20	0	20
10+75.00	7.5	0.0	5.8	0.1	26	0	26
11+00.00	8.1	0.1	7.2	0.1	33	1	33
11+25.00	9.0	0.0	7.9	0.1	41	1	40
11+42.09	10.7	0.0	6.2	0.0	47	1	47
11+50.00	7.7	0.0	2.7	0.0	50	1	49
11+75.00	8.0	0.0	7.3	0.0	57	1	57
11+83.58	9.8	0.1	2.8	0.0	60	1	59
12+00.00	7.5	0.1	5.3	0.1	65	1	65
12+25.00	7.3	0.3	6.8	0.2	72	1	71
12+50.00	9.8	0.4	7.9	0.3	80	1	79
12+58.15	10.8	0.7	3.1	0.2	83	1	82
12+75.00	5.2	1.5	5.0	0.7	88	2	86
13+00.00	9.9	0.3	7.0	0.8	95	3	92
13+10.08	10.2	0.3	3.7	0.1	99	3	96
13+25.00	6.5	0.3	4.6	0.2	103	3	100
13+50.00	7.2	0.1	6.4	0.2	110	3	106
13+72.66	7.2	0.0	6.1	0.0	116	3	113
13+75.00	3.8	0.0	0.5	0.0	116	3	113
14+70.73	4.5	0.1	0.0	0.0	116	3	113
14+75.00	2.5	0.2	0.6	0.0	117	3	114
14+76.97	5.7	0.5	0.3	0.0	117	3	114
15+00.00	10.1	0.2	6.7	0.3	124	4	120
15+03.61	10.2	0.2	1.4	0.0	125	4	122
15+25.00	7.1	0.3	6.8	0.2	132	4	128
15+50.00	6.9	0.7	6.5	0.5	139	4	134
15+75.00	8.0	0.9	6.9	0.7	146	5	141
15+84.50	8.7	0.7	2.9	0.3	149	5	143
16+00.00	8.1	0.1	4.8	0.2	153	6	148
16+25.00	9.6	0.2	8.2	0.1	162	6	156
16+33.85	9.3	0.2	3.1	0.1	165	6	159
16+50.00	7.6	0.3	5.0	0.1	170	6	164
16+63.72	8.5	0.3	4.1	0.2	174	6	168
16+75.00	8.8	0.3	3.6	0.1	177	6	171
17+00.00	7.2	0.1	7.4	0.2	185	6	178
17+10.50	7.3	0.0	2.8	0.0	188	6	181
17+25.00	7.3	0.0	3.9	0.0	191	6	185
17+50.00	8.0	0.0	7.1	0.0	199	6	192
17+63.86	7.3	0.2	3.9	0.0	202	6	196
18+23.90	11.0	0.0	0.0	0.0	202	6	196
18+25.00	10.5	0.0	0.4	0.0	203	6	196
18+50.00	6.3	0.3	7.8	0.1	211	7	204
18+75.00	6.3	0.5	5.8	0.4	216	7	210
19+00.00	7.8	1.1	6.5	0.7	223	8	215
19+25.00	5.7	0.9	6.2	0.9	229	9	221
19+50.00	7.8	0.6	6.2	0.7	235	9	226
19+60.35	8.0	0.3	3.0	0.2	238	9	229
19+75.00	6.5	0.5	4.0	0.2	242	10	233
19+91.47	9.9	0.8	5.0	0.4	247	10	237
20+00.00	8.6	0.4	2.9	0.2	250	10	240
20+25.00	6.4	0.3	7.0	0.3	257	11	247
20+50.00	7.2	0.2	6.3	0.2	264	11	253
20+75.00	7.6	0.1	6.9	0.1	270	11	260
21+00.00	8.6	0.0	7.5	0.1	278	11	267
21+25.00	9.2	0.0	8.2	0.0	286	11	275
21+31.69	8.9	0.0	2.2	0.0	288	11	277

EARTHWORK COMPUTATIONS SUMMARY				
Location	Cut (CY)	Fill (CY)	Excavation Total (CY)	Mass Haul (CY)
Oak Avenue	288	11	299	277
Additions:				
Curb Ramps (not real numbers)	34			
Deductions:				
Concrete Curb and Gutter Removal	0			
7" Concrete Pavement Removal	-7			
6" Concrete Driveway Removal	-33			
4" Concrete Sidewalk Removal	-131			
3" Asphalt Surface Removal	-14			
TOTALS:	137	11	148	126

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EARTHWORK COMPUTATIONS - ALLEY

Station	Area (SF)		Incremental Volume (CY)		Cumulative Volume (CY)		Mass Haul
	Cut	Fill	Cut	Fill	Cut	Fill	
10+00.12	35.5	0.1	0.0	0.0	0	0	0
10+05.00	34.6	0.1	6.3	0.0	6	0	6
10+10.00	32.5	0.1	6.2	0.0	13	0	13
10+25.00	33.7	0.0	18.4	0.0	31	0	31
10+50.00	35.1	0.0	31.9	0.0	63	0	63
10+75.00	34.7	0.0	32.3	0.0	95	0	95
11+00.00	36.0	0.1	32.7	0.0	128	0	128
11+25.00	36.3	0.1	33.5	0.1	161	0	161
11+50.00	37.3	0.0	34.1	0.0	195	0	195
11+75.00	36.2	0.0	34.1	0.0	230	0	229
12+00.00	36.0	0.0	33.4	0.0	263	0	263
12+25.00	34.3	0.1	32.5	0.1	295	0	295
12+50.00	33.4	0.2	31.4	0.1	327	0	327
12+66.59	32.7	0.0	20.3	0.1	347	0	347
12+75.00	33.1	0.0	10.2	0.0	357	0	357
13+00.00	33.6	0.0	30.9	0.0	388	0	388
13+07.64	35.2	0.0	9.7	0.0	398	0	398

**EARTHWORK COMPUTATIONS
SUMMARY**

Location	Cut (CY)	Fill (CY)	Excavation Total (CY)	Mass Haul (CY)
Alley	398	0	398	398
SUBTOTALS:	398	0	398	398
Deductions:				
7" Concrete Pavement Removal	-105			
3" Asphalt Surface Removal	-12			
TOTALS:	281	0	281	281

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EARTHWORK COMPUTATIONS - WEST 2ND STREET

Station	Area (SF)		Incremental Volume (CY)		Cumulative Volume (CY)		Mass Haul
	Cut	Fill	Cut	Fill	Cut	Fill	
19+86.05	48.7	0.0	0.0	0.0	0	0	0
20+00.00	30.9	0.0	20.6	0.0	21	0	21
20+08.00	36.6	0.0	10.0	0.0	31	0	31
20+25.00	28.3	0.0	19.8	0.0	50	0	50
20+50.00	26.0	0.0	24.2	0.0	75	0	75
20+56.14	15.9	0.0	4.8	0.0	79	0	79
20+75.00	10.3	0.0	9.2	0.0	88	0	88
21+00.00	11.7	0.0	10.2	0.0	99	0	99
21+17.42	13.9	0.0	8.3	0.0	107	0	107
21+25.00	13.9	0.0	3.9	0.0	111	0	111
21+45.81	10.3	0.0	9.3	0.0	120	0	120
21+50.00	10.3	0.0	1.6	0.0	122	0	122
21+71.08	10.5	0.0	8.1	0.0	130	0	130
21+75.00	11.5	0.0	1.6	0.0	131	0	131
21+84.09	11.3	0.0	3.8	0.0	135	0	135
22+00.00	1.8	0.0	3.9	0.0	139	0	139
22+25.00	1.8	0.0	1.7	0.0	141	0	141
22+36.08	10.4	0.0	2.5	0.0	143	0	143
22+50.00	10.3	0.0	5.3	0.0	149	0	149
22+61.36	10.5	0.0	4.4	0.0	153	0	153
22+75.00	10.4	0.0	5.3	0.0	158	0	158
23+00.00	10.4	0.0	9.6	0.0	168	0	168
23+04.34	25.0	0.0	2.8	0.0	171	0	171
23+25.00	26.8	0.0	19.8	0.0	191	0	191
23+35.57	24.8	0.0	10.1	0.0	201	0	201
23+44.47	25.4	0.0	8.3	0.0	209	0	209
23+50.00	31.4	0.0	5.8	0.0	215	0	215
23+54.48	35.4	0.0	5.5	0.0	220	0	220
23+75.00	71.1	0.0	40.5	0.0	261	0	261
23+76.42	71.2	0.0	3.7	0.0	265	0	265

**EARTHWORK COMPUTATIONS
SUMMARY - WEST 2ND STREET**

Location	Cut (CY)	Fill (CY)	Excavation Total (CY)	Mass Haul (CY)
West 2nd Street	265	0	265	265
SUBTOTALS:	265	0	265	265
Deductions:				
Concrete Curb and Gutter Removal	-32			
8" Concrete Pavement Removal	-42			
5" Concrete Sidewalk Removal	-170			
TOTALS:	21	0	21	21

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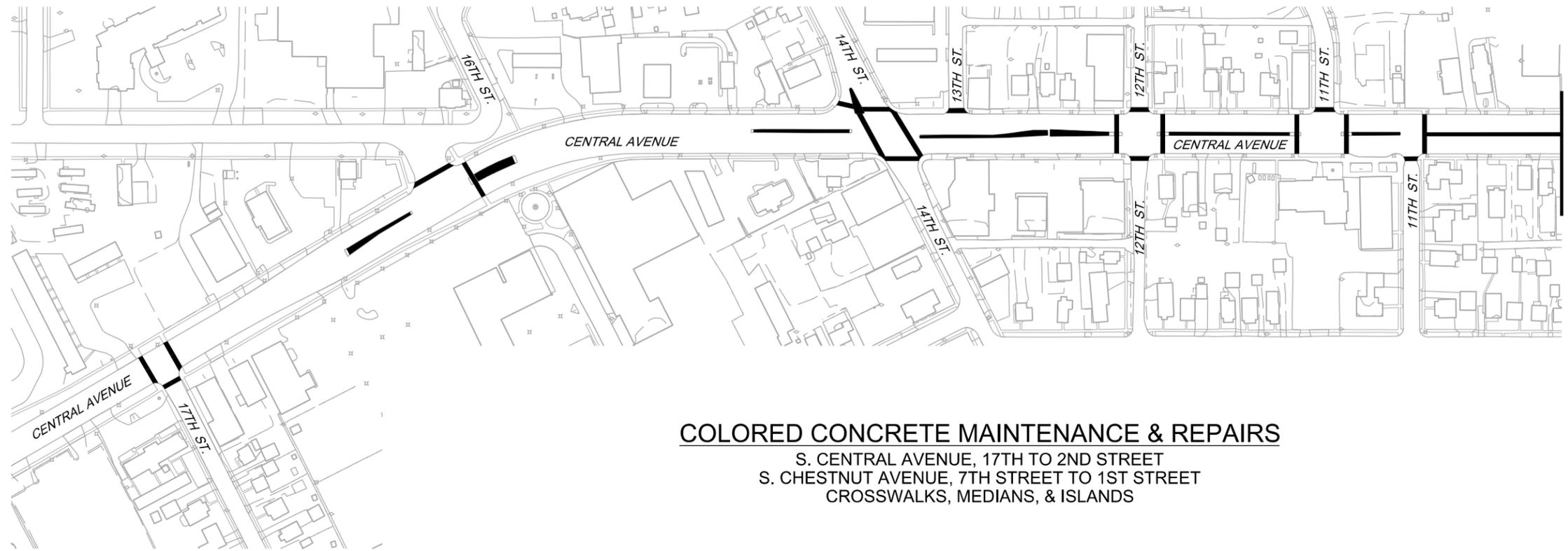
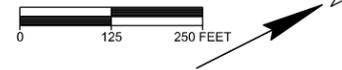
EARTHWORK COMPUTATIONS - EAST 2ND STREET

Station	Area (SF)		Incremental Volume (CY)		Cumulative Volume (CY)		Mass Haul
	Cut	Fill	Cut	Fill	Cut	Fill	
19+75.71	0.0	0.0	0.0	0.0	0	0	0
20+00.00	61.8	2.6	27.8	1.2	28	1	27
20+07.78	60.2	6.8	17.6	1.4	45	3	43
20+13.75	61.1	6.1	13.4	1.4	59	4	55
20+25.00	68.1	5.7	26.9	2.5	86	7	79
20+44.97	91.7	1.8	59.1	2.8	145	9	136
20+50.00	91.2	2.0	17.0	0.4	162	10	152
20+75.00	89.7	1.9	83.7	1.8	246	12	234
21+00.00	87.3	2.0	81.9	1.8	327	13	314
21+03.95	86.7	2.0	12.7	0.3	340	14	327
21+25.00	101.1	0.0	73.2	0.8	413	14	399
21+29.23	102.1	0.0	15.9	0.0	429	14	415
21+50.00	101.6	1.2	78.3	0.4	508	15	493
21+65.23	101.9	4.8	57.4	1.7	565	17	548
21+75.00	107.7	1.9	37.9	1.2	603	18	585
22+00.00	97.9	1.8	95.2	1.7	698	19	679
22+05.95	105.2	2.7	22.4	0.5	720	20	701
22+25.00	75.5	7.2	63.7	3.5	784	23	761
22+31.23	70.5	12.6	16.8	2.3	801	26	775
22+50.00	68.1	5.8	48.2	6.4	849	32	817
22+75.00	75.0	3.3	66.2	4.2	915	36	879
22+88.23	74.5	3.4	36.6	1.6	952	38	914
23+00.00	67.9	4.3	31.1	1.7	983	40	943
23+22.43	8.3	0.4	31.7	2.0	1015	42	973
23+25.00	12.5	0.5	1.0	0.0	1016	42	974
23+44.39	0.0	0.0	4.5	0.2	1020	42	978

**EARTHWORK COMPUTATIONS
SUMMARY - EAST 2ND STREET**

Location	Cut (CY)	Fill (CY)	Excavation Total (CY)	Mass Haul (CY)
East 2nd Street	1020	42	1062	978
SUBTOTALS:	1020	42	1062	978
Additions:				
Fill for Abandoned Vaults		20		
Excavation for Parking Lot	51			
Deductions:				
Existing pavement removal quantity accounted for in cross-sections.	0			
TOTALS:	1071	62	1133	1009

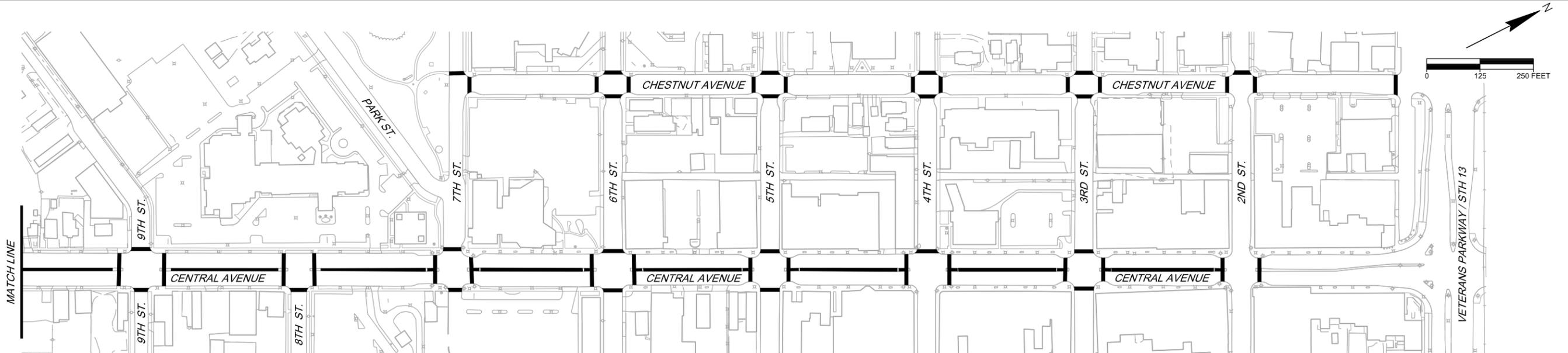
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COLORED CONCRETE MAINTENANCE & REPAIRS

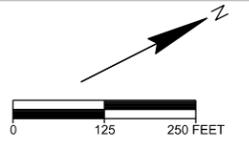
S. CENTRAL AVENUE, 17TH TO 2ND STREET
S. CHESTNUT AVENUE, 7TH STREET TO 1ST STREET
CROSSWALKS, MEDIANS, & ISLANDS

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COLORED CONCRETE MAINTENANCE & REPAIRS

S. CENTRAL AVENUE, 17TH TO 2ND STREET
S. CHESTNUT AVENUE, 7TH STREET TO 1ST STREET
CROSSWALKS, MEDIANS, & ISLANDS



**Colored Concrete Maintenance & Repairs
S. Chestnut Avenue, 7th Street to 1st Street**

Crosswalks

Location of Intersection	Leg	Traffic Flow Direction	Code	Re-Seal Ex. Surface Area {SY}
1 7th & Chestnut	N	NB & SB	7 N	29.8
2 7th & Chestnut	W	EB & WB	7 W	33.9
3 6th & Chestnut	E	EB & WB	6 E	30.5
4 6th & Chestnut	N	NB & SB	6 N	28.7
5 6th & Chestnut	S	NB & SB	6 S	28.7
6 6th & Chestnut	W	EB & WB	6 W	32.6
7 5th & Chestnut	E	EB & WB	5 E	30.5
8 5th & Chestnut	N	NB & SB	5 N	28.7
9 5th & Chestnut	S	NB & SB	5 S	28.7
10 5th & Chestnut	W	EB & WB	5 W	32.6
11 4th & Chestnut	E	EB & WB	4 E	30.5
12 4th & Chestnut	N	NB & SB	4 N	29.5
13 4th & Chestnut	S	NB & SB	4 S	29.5
14 4th & Chestnut	W	EB & WB	4 W	32.6
15 3rd & Chestnut	E	EB & WB	3 E	30.5
16 3rd & Chestnut	N	NB & SB	3 N	28.7
17 3rd & Chestnut	S	NB & SB	3 S	28.7
18 3rd & Chestnut	W	EB & WB	3 W	32.6
19 2nd & Chestnut	E	EB & WB	2 E	N/A
20 2nd & Chestnut	N	NB & SB	2 N	29.3
21 2nd & Chestnut	S	NB & SB	2 S	29.3
22 2nd & Chestnut	W	EB & WB	2 W	29.5
23 1st & Chestnut	S	NB & SB	1 S	38.8
Totals				674.2 SY

**Colored Concrete Maintenance & Repairs
S. Central Avenue, 17th Street to 2nd Street**

Islands

Location of Intersection	Leg	Re-Seal Ex. Surface Area {SY}
1 16th & Central	N	151.7
2 16th & Central	S	120.8
3 14th & Central	N	171
4 14th & Central	S	108.8
5 14th & Central	W	30.4
6 7th & Central	N	8.7
7 7th & Central	S	8.7
8 6th & Central	N	8.7
9 6th & Central	S	8.7
10 5th & Central	N	8.7
11 5th & Central	S	8.7
12 4th & Central	N	8.7
13 4th & Central	S	8.7
14 3rd & Central	N	8.7
15 3rd & Central	S	8.7
16 2nd & Central	N	8.7
Total		678.4 SY

**Colored Concrete Maintenance & Repairs
S. Central Avenue, 17th Street to 2nd Street**

Medians

Segment	Length {LF}	Width {LF}	Re-Seal Ex. Surface Area {SY}
1 13th to 12th	116	Varies	115.4
2 12th to 11th S	237	6	158.0
3 11th S to 11th N	90	6	60.0
4 11th N to 9th	470	6	313.3
5 9th to 8th	255	6	170.0
6 8th to 7th	265	6	181.7
7 7th to 6th	230	9	230.0
8 6th to 5th	228	9	228.0
9 5th to 4th	230	9	230.0
10 4th to 3rd	231	9	231.0
11 3rd to 2nd	235	9	235.0
Total			2152.4 SY

**Colored Concrete Maintenance & Repairs
S. Central Avenue, 17th Street to 2nd Street**

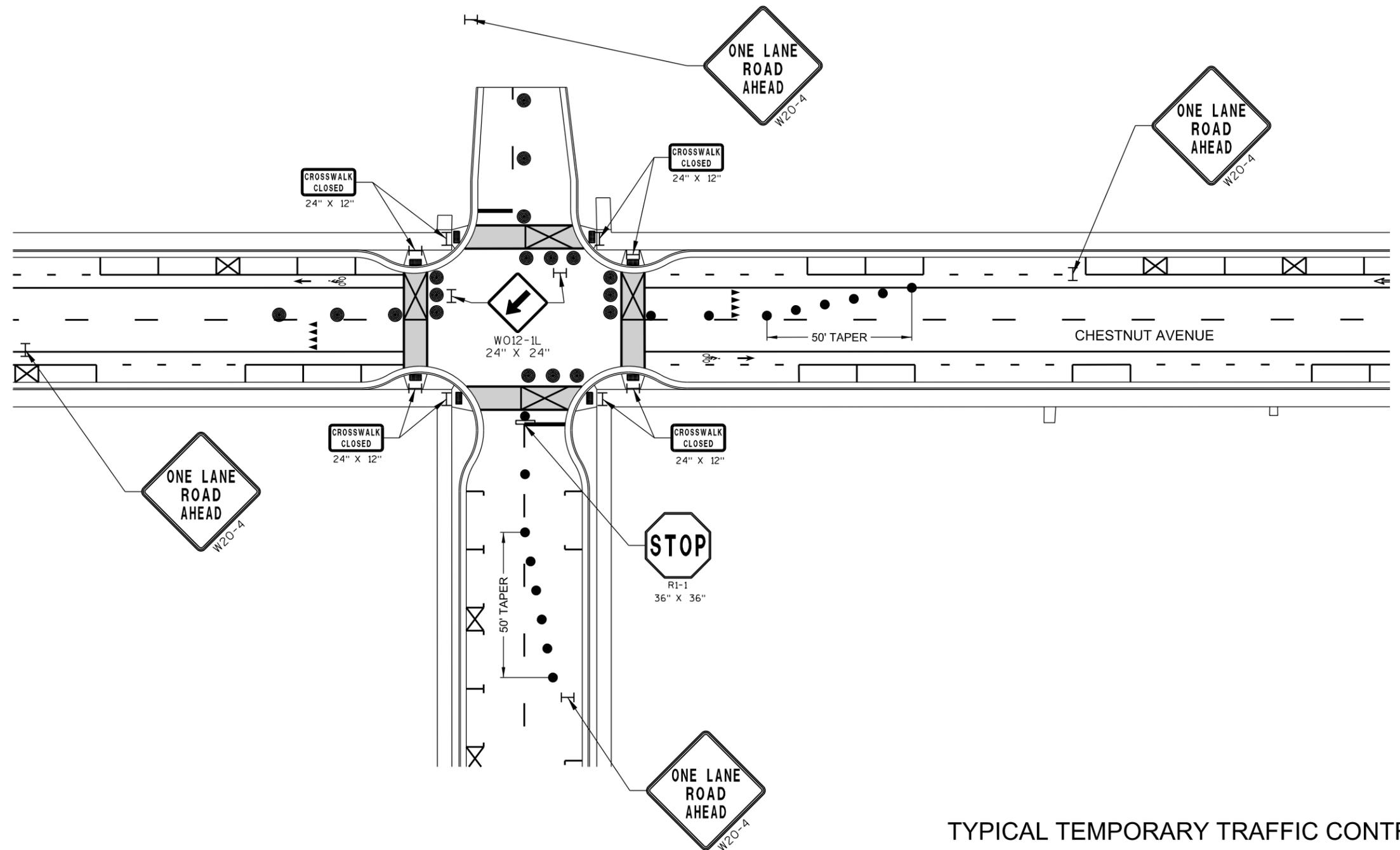
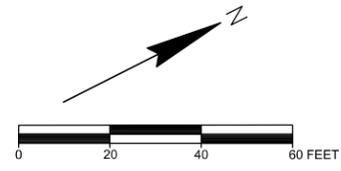
Crosswalks

Location of Intersection	Leg	Traffic Flow Direction	Code	Re-Seal Ex. Surface Area {SY}	Clean, Treat & Re-Seal Ex. Joint {LF}	Partial-Depth Repair {SF}
1 17th & Central	E	EB & WB	17 E	29.3	64	21
2 17th & Central	N	NB & SB	17 N	48.0	137	18
3 17th & Central	S	NB & SB	17 S	48.0	92	49
4 16th & Central	N	NB	16 NE	23.1	74	5
5 16th & Central	N	SB	16 NW	23.1	84	0
6 16th & Central	W	EB & WB	16 W	69.8	226	0
7 14th & Central	E	EB & WB	14 E	61.3	134	29
8 14th & Central	N	NB & SB	14 N	87.6	262	8
9 14th & Central	S	NB & SB	14 S	79.1	259	0
10 14th & Central	W	EB & WB	14 W	47.1	151	0
11 14th & Central	W	EB Rt	14 Rt	26.7	94	0
12 13th & Central	W	EB & WB	13 W	24.9	58	0
13 12th & Central	E	EB & WB	12 E	28.9	107	0
14 12th & Central	N	NB	12 NE	29.3	98	0
15 12th & Central	N	SB	12 NW	29.3	98	0
16 12th & Central	S	NB	12 SE	29.3	98	0
17 12th & Central	S	SB	12 SW	29.3	94	2
18 12th & Central	W	EB & WB	12 W	28.9	107	0
19 11th & Central - South	M	NB	11S ME	29.3	62	18
20 11th & Central - South	M	SB	11S MW	29.3	98	0
21 11th & Central - South	S	NB	11S SE	29.3	74	12
22 11th & Central - South	S	SB	11S SW	29.3	98	0
23 11th & Central - South	W	EB & WB	11S W	30.7	127	0
24 11th & Central - North	E	EB & WB	11N E	20.4	68	10
25 11th & Central - North	N	NB	11N NE	29.3	48	25
26 11th & Central - North	N	SB	11N NW	29.3	98	0
27 9th & Central	E	EB & WB	9 E	25.8	68	16
28 9th & Central	N	NB	9 NE	29.3	98	0
29 9th & Central	N	SB	9 NW	29.3	98	0
30 9th & Central	S	NB	9 SE	29.3	64	17
31 9th & Central	S	SB	9 SW	29.3	94	2
32 9th & Central	W	EB & WB	9 W	36.0	139	0
33 8th & Central	E	EB & WB	8 E	31.1	90	19
34 8th & Central	N	NB	8 NE	29.3	26	42
35 8th & Central	N	SB	8 NW	29.3	98	0
36 8th & Central	S	NB	8 SE	29.3	74	12
37 8th & Central	S	SB	8 SW	29.3	98	0
38 7th & Central	E	EB & WB	7 E	35.1	121	0
39 7th & Central	N	NB	7 NE	23.1	66	15
40 7th & Central	N	SB	7 NW	23.1	84	0
41 7th & Central	S	NB	7 SE	23.1	68	8
42 7th & Central	S	SB	7 SW	23.1	84	1
43 7th & Central	W	EB & WB	7 W	26.7	94	0
44 6th & Central	E	EB & WB	6 E	41.3	151	0
45 6th & Central	N	NB	6 NE	26.2	91	0
46 6th & Central	N	SB	6 NW	26.2	91	0
47 6th & Central	S	NB	6 SE	26.2	85	3
48 6th & Central	S	SB	6 SW	26.2	91	0
49 6th & Central	W	EB & WB	6 W	39.6	147	0
50 5th & Central	E	EB & WB	5 E	36.4	124	0
51 5th & Central	N	NB	5 NE	18.7	45	11
52 5th & Central	N	SB	5 NW	18.7	45	11
53 5th & Central	S	NB	5 SE	18.7	55	11
54 5th & Central	S	SB	5 SW	18.7	62	2
55 5th & Central	W	EB & WB	5 W	36.0	123	0
56 4th & Central	E	EB & WB	4 E	N/A	N/A	0
57 4th & Central	N	NB	4 NE	26.2	91	0
58 4th & Central	N	SB	4 NW	26.2	91	0
59 4th & Central	S	NB	4 SE	26.2	79	6
60 4th & Central	S	SB	4 SW	26.2	73	15
61 4th & Central	W	EB & WB	4 W	39.6	147	0
62 3rd & Central	E	EB & WB	3 E	36.9	117	4
63 3rd & Central	N	NB	3 NE	18.7	48	12
64 3rd & Central	N	SB	3 NW	18.7	54	9
65 3rd & Central	S	NB	3 SE	18.7	60	3
66 3rd & Central	S	SB	3 SW	18.7	66	0
67 3rd & Central	W	EB & WB	3 W	36.0	123	0
68 2nd & Central	E	EB & WB	2 E	N/A	N/A	0
69 2nd & Central	N	NB	2 NE	18.7	45	14
70 2nd & Central	N	SB	2 NW	18.7	34	25
71 2nd & Central	S	NB	2 SE	18.7	66	0
72 2nd & Central	S	SB	2 SW	18.7	45	14
73 2nd & Central	W	EB & WB	2 W	N/A	N/A	0
Totals				2025.9 SY	6330 LF	381 SF

PLOTTED ON: 3/11/2016 12:50:48 PM

LEGEND

	TYPE III BARRICADE W/ FLASHER
	SIGN ON POST OR TYPE II BARRICADE
	DRUM, REFLECTORIZED
	CONE W/ RUBBER BASE, 42" TALL, REFLECTORIZED
	TRAFFIC CONTROL - TRAFFIC FLOW

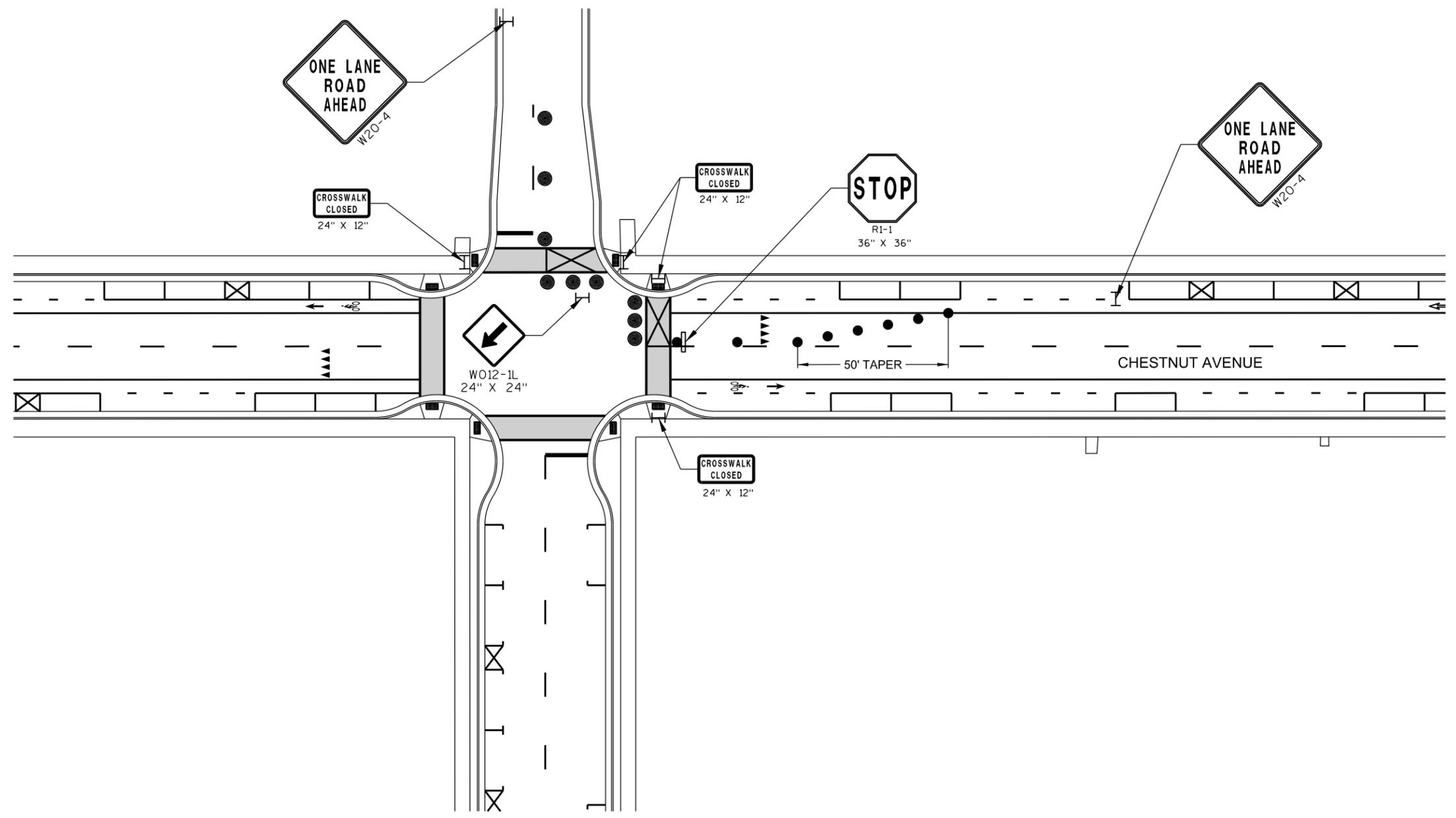
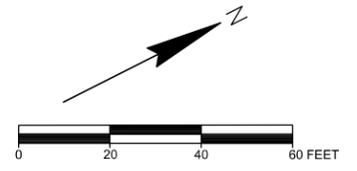


TYPICAL TEMPORARY TRAFFIC CONTROL
CHESTNUT AVENUE AND 3RD, 5TH & 6TH STREETS

PLOTTED ON: 3/11/2016 12:50:52 PM

LEGEND

	TYPE III BARRICADE W/ FLASHER
	SIGN ON POST OR TYPE II BARRICADE
	DRUM, REFLECTORIZED
	CONE W/ RUBBER BASE, 42" TALL, REFLECTORIZED
	TRAFFIC CONTROL - TRAFFIC FLOW

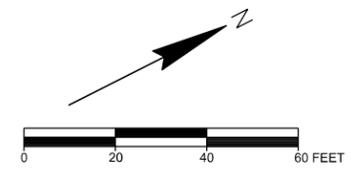


TYPICAL TEMPORARY TRAFFIC CONTROL
CHESTNUT AVENUE AND 2ND, 4TH & 7TH STREETS

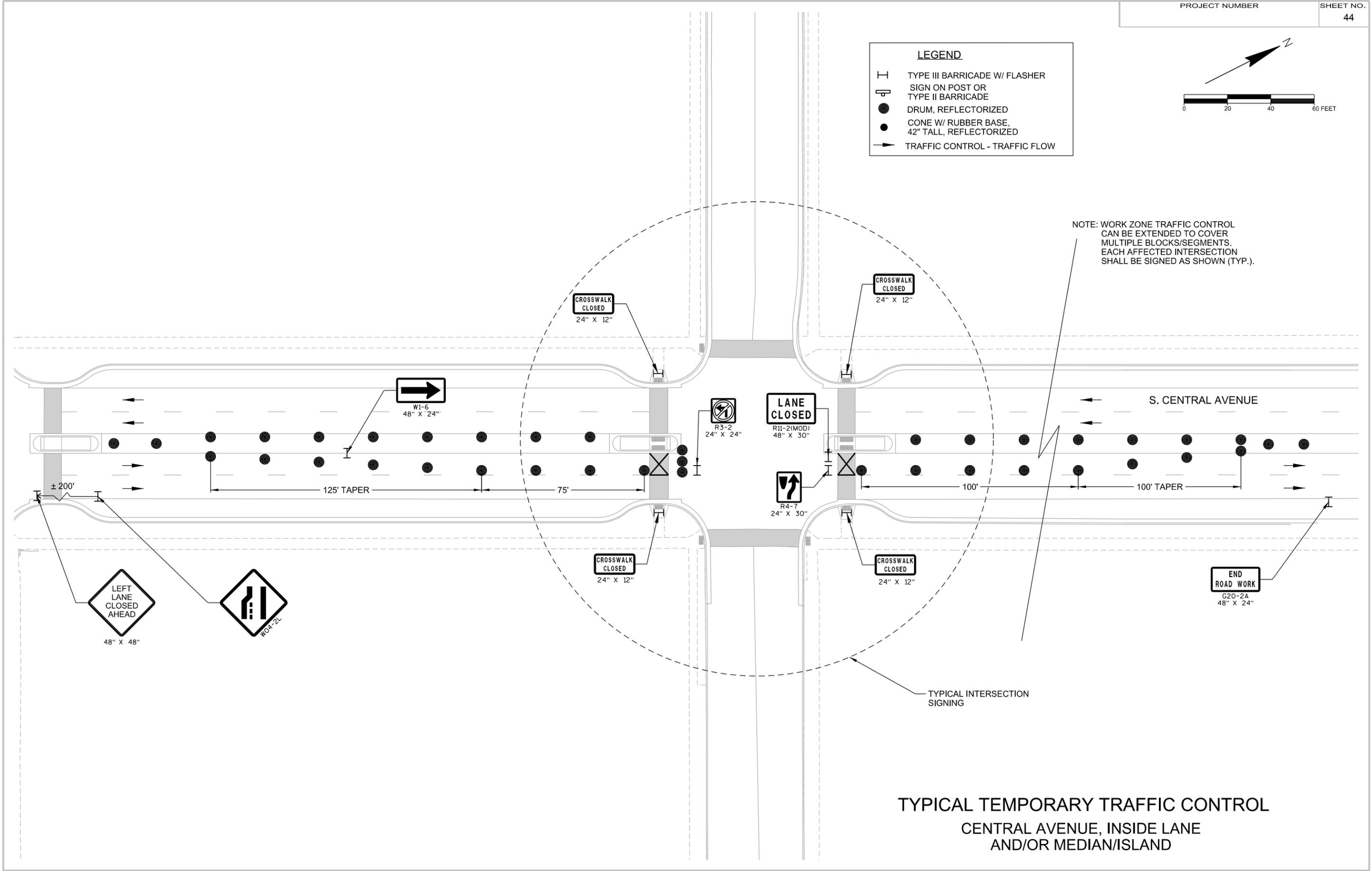
PLOTTED ON: 3/11/2016 12:50:53 PM

LEGEND

-  TYPE III BARRICADE W/ FLASHER
-  SIGN ON POST OR TYPE II BARRICADE
-  DRUM, REFLECTORIZED
-  CONE W/ RUBBER BASE, 42" TALL, REFLECTORIZED
-  TRAFFIC CONTROL - TRAFFIC FLOW



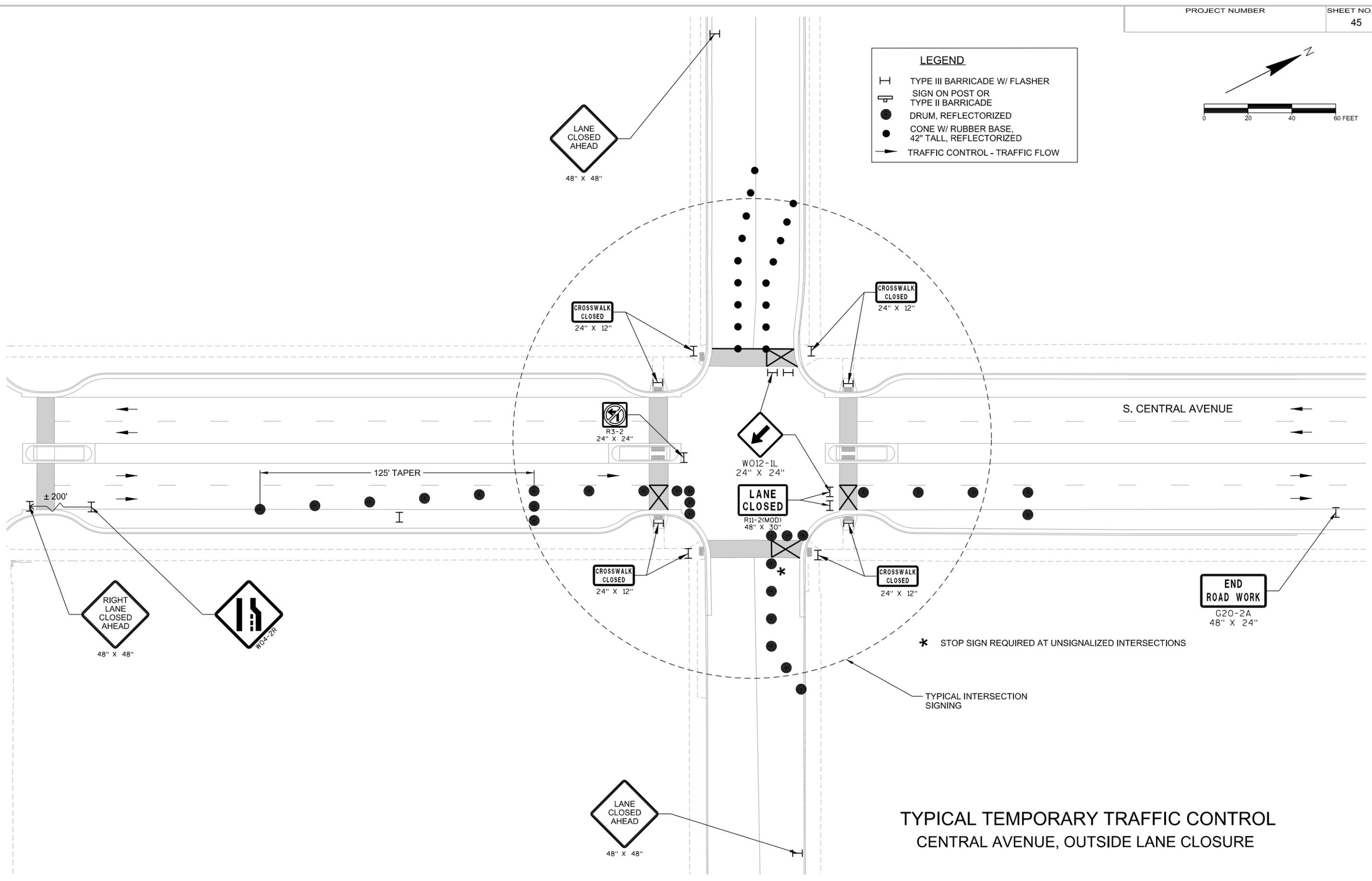
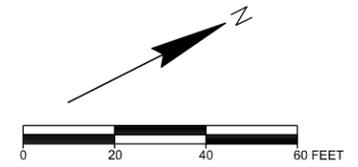
NOTE: WORK ZONE TRAFFIC CONTROL CAN BE EXTENDED TO COVER MULTIPLE BLOCKS/SEGMENTS. EACH AFFECTED INTERSECTION SHALL BE SIGNED AS SHOWN (TYP.).



**TYPICAL TEMPORARY TRAFFIC CONTROL
CENTRAL AVENUE, INSIDE LANE
AND/OR MEDIAN/ISLAND**

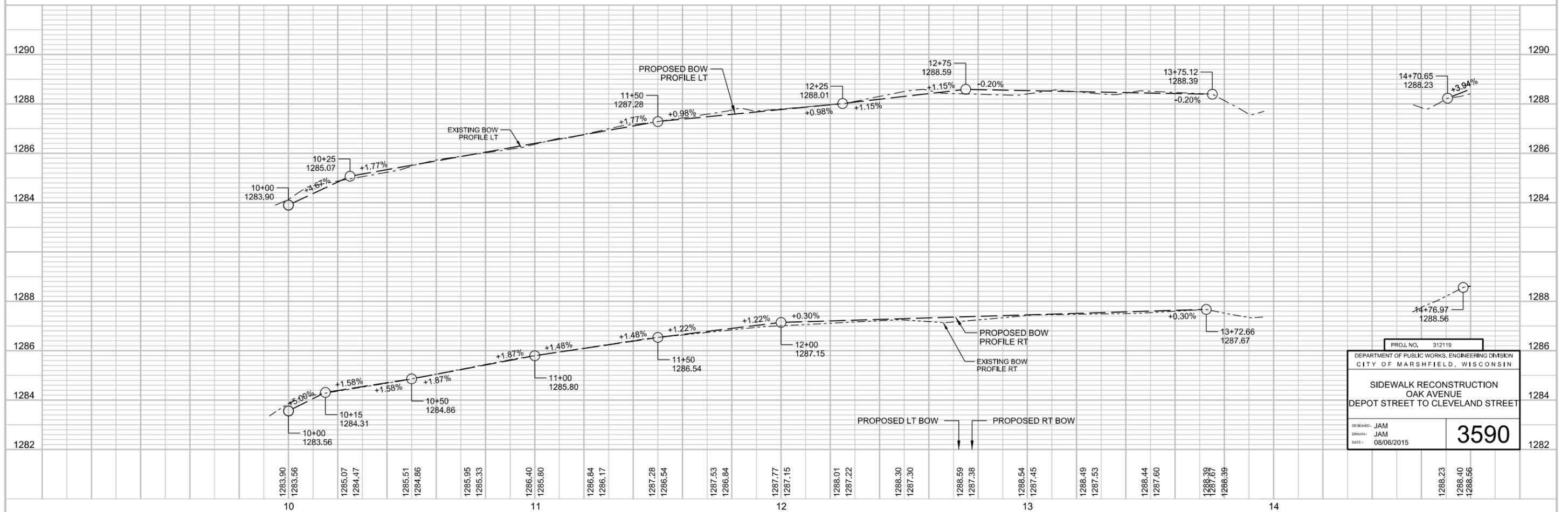
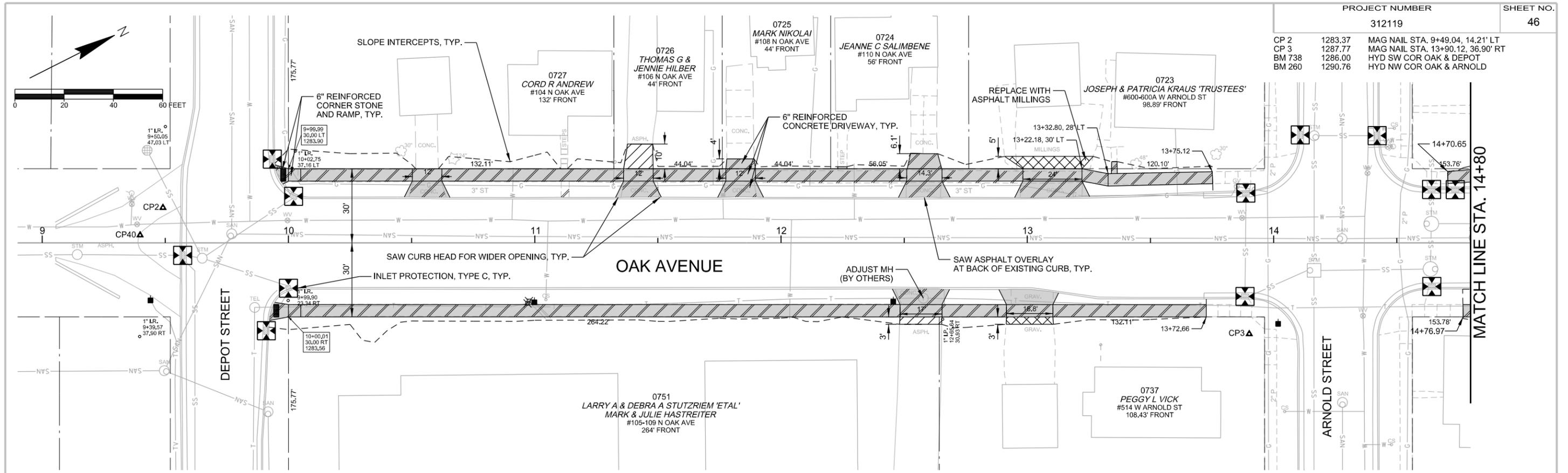
PLOTTED ON: 3/11/2016 12:50:54 PM

LEGEND	
	TYPE III BARRICADE W/ FLASHER
	SIGN ON POST OR TYPE II BARRICADE
	DRUM, REFLECTORIZED
	CONE W/ RUBBER BASE, 42" TALL, REFLECTORIZED
	TRAFFIC CONTROL - TRAFFIC FLOW

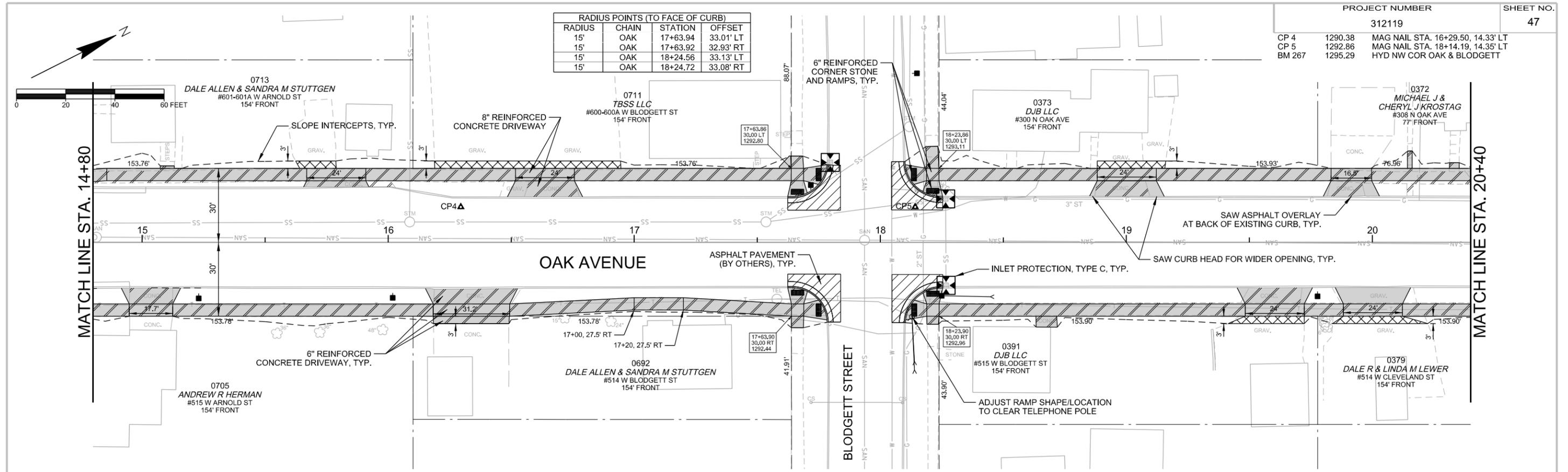


TYPICAL TEMPORARY TRAFFIC CONTROL
CENTRAL AVENUE, OUTSIDE LANE CLOSURE

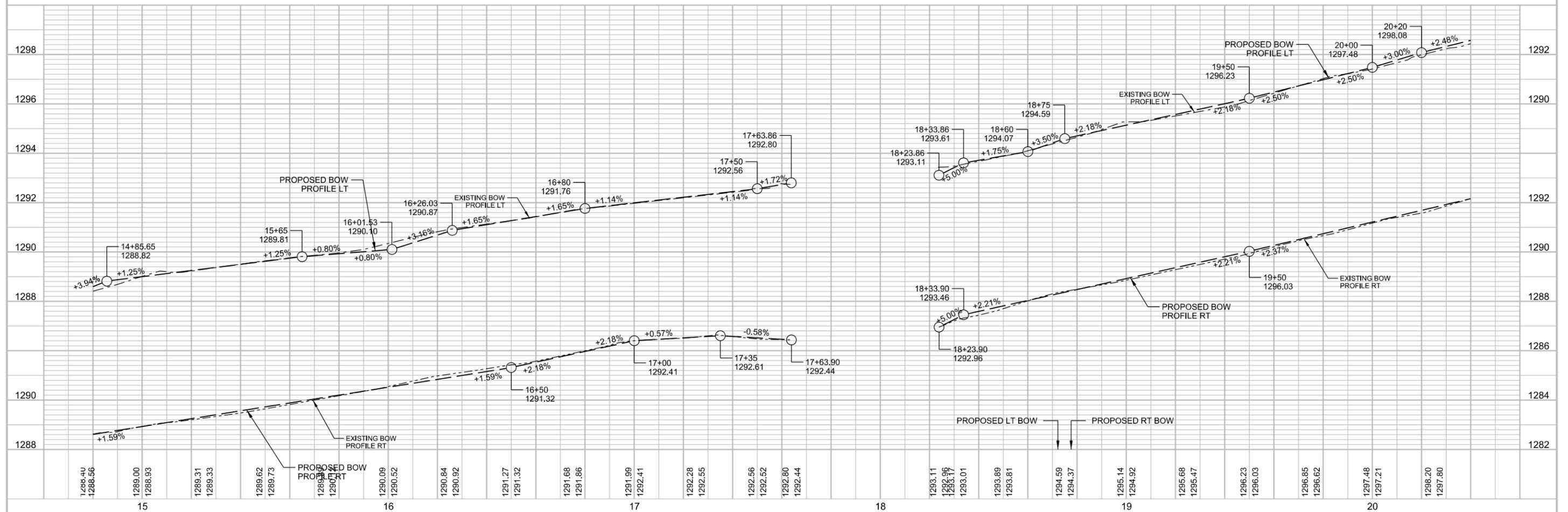
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PLOTTED ON: 3/11/2016 12:50:56 PM



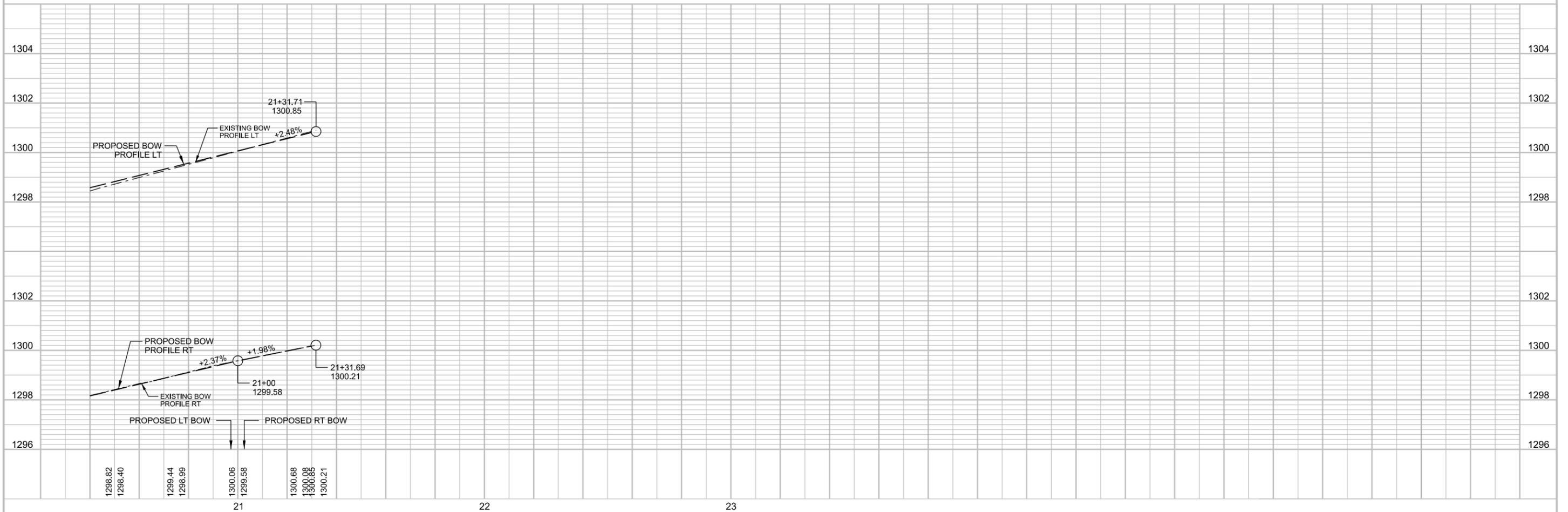
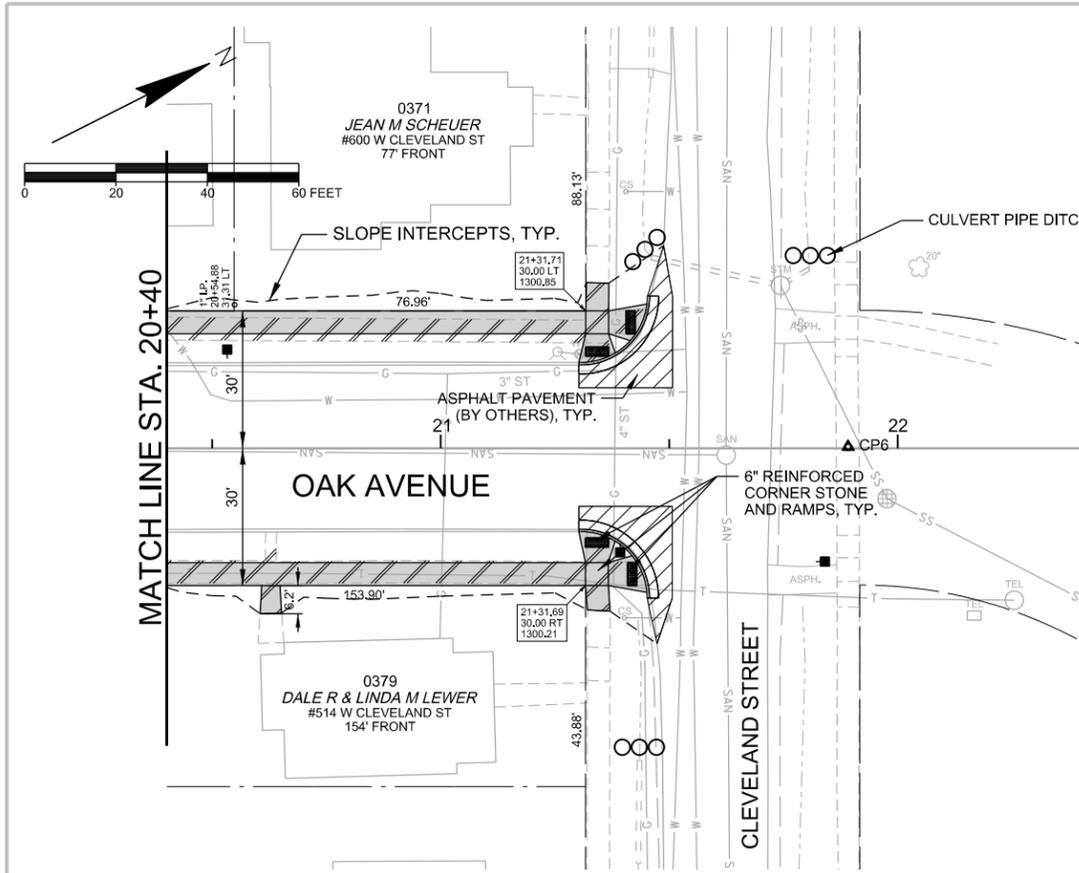
PROJECT NUMBER			SHEET NO.
312119			47
CP 4	1290.38	MAG NAIL STA. 16+29.50, 14.33' LT	
CP 5	1292.86	MAG NAIL STA. 18+14.19, 14.35' LT	
BM 267	1295.29	HYD NW COR OAK & BLODGETT	



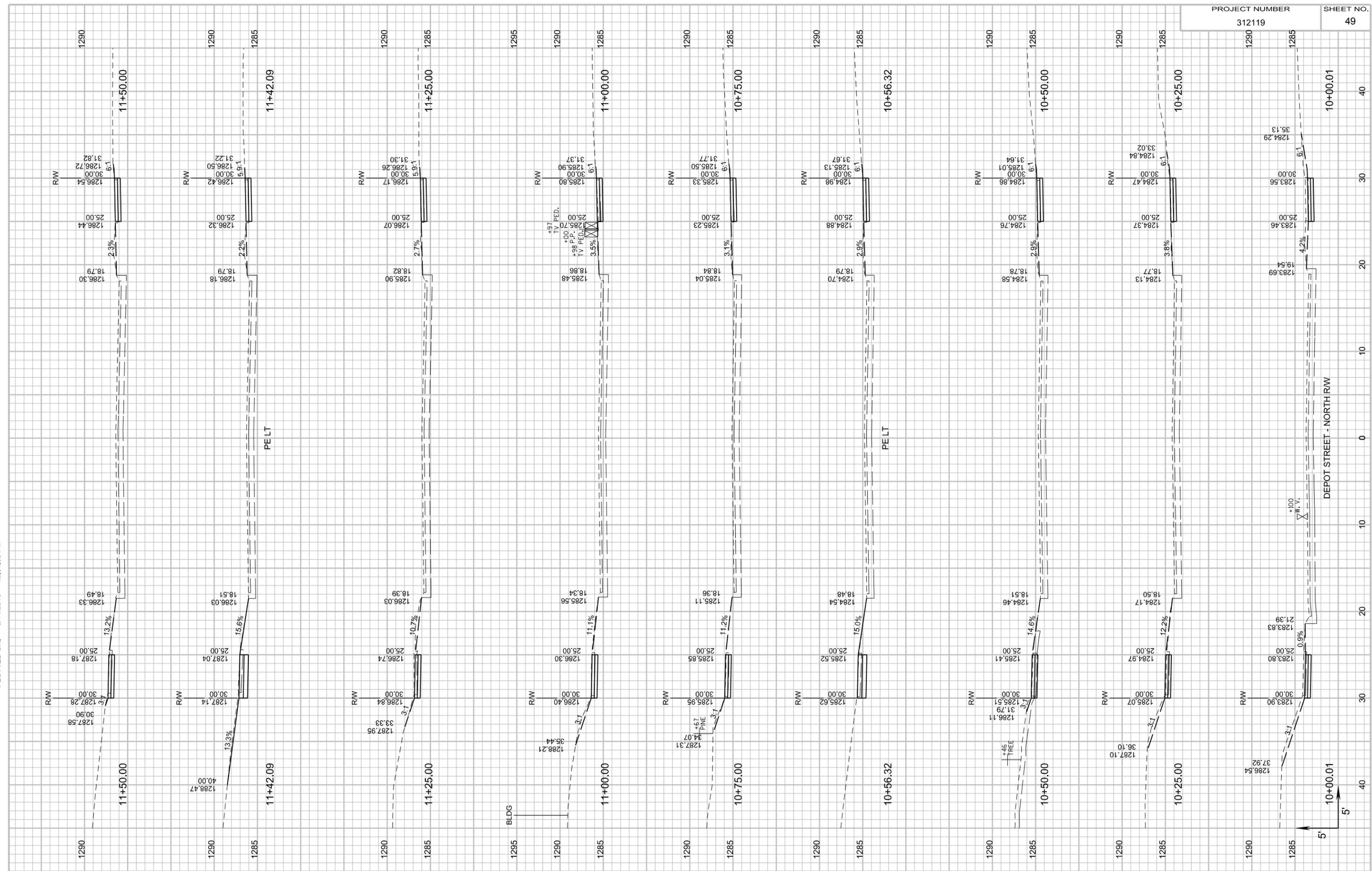
PLOTTED ON: 3/11/2016 12:50:57 PM

PROJECT NUMBER		312119		SHEET NO.	48
CP 6	1301.03	MAG NAIL STA. 21+89.15, 0.30' LT			
BM 274	1303.71	HYD SW COR OAK & CLEVELAND			

RADIUS POINTS (TO FACE OF CURB)			
RADIUS	CHAIN	STATION	OFFSET
15'	OAK	21+30.71	33.19' LT
15'	OAK	21+30.69	32.70' RT



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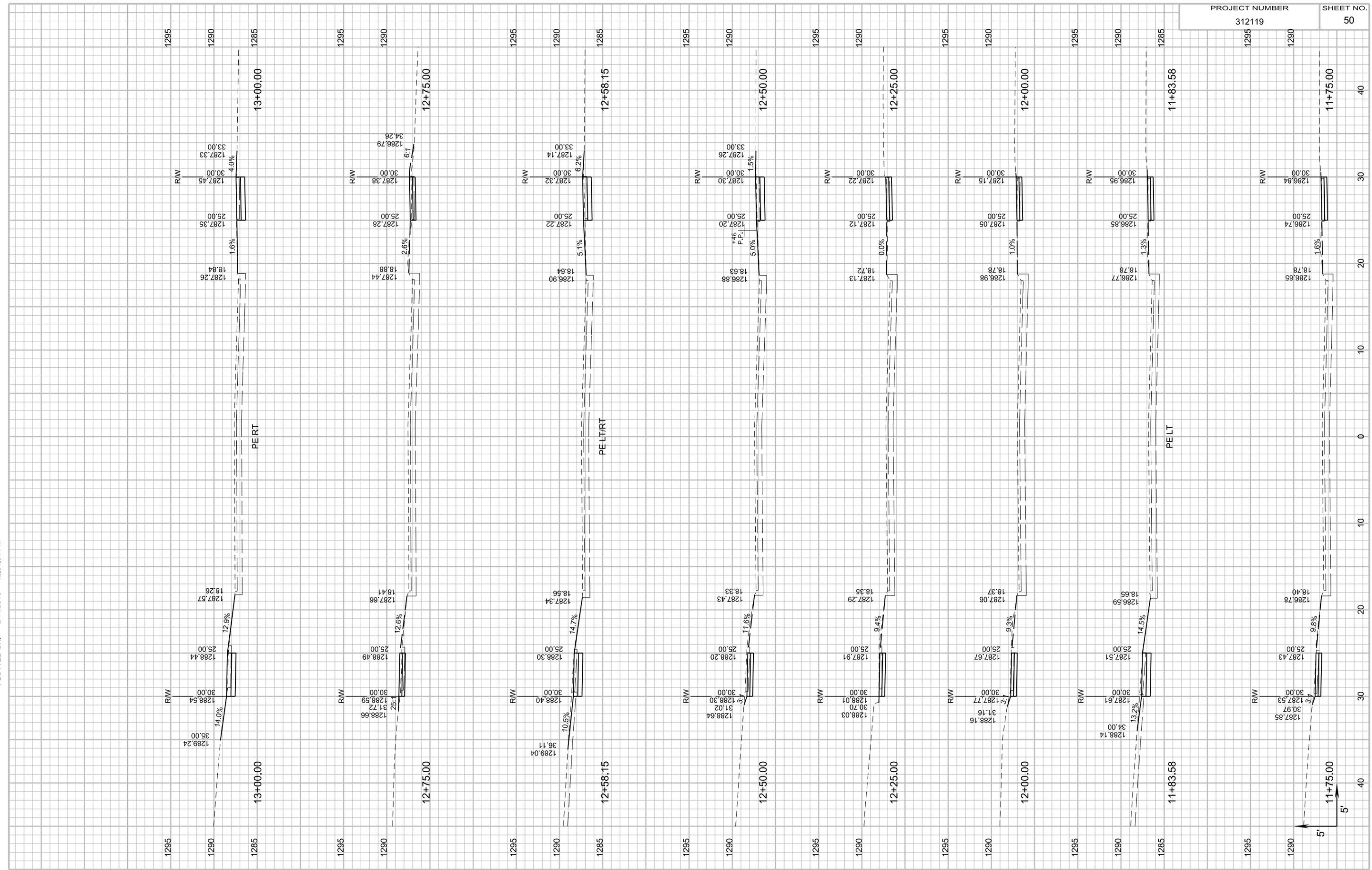
PLOTTED ON: 3/11/2016 12:51:00 PM

FILE NAME: F:\Home\PW\CAD\FILES\3590\3590_701.dgn

PROJECT NUMBER	312119	SHEET NO.	49
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3590-4

OAK AVENUE STA. 10+00.01 TO STA. 11+50.00



PROJECT NUMBER
312119

SHEET NO.
50

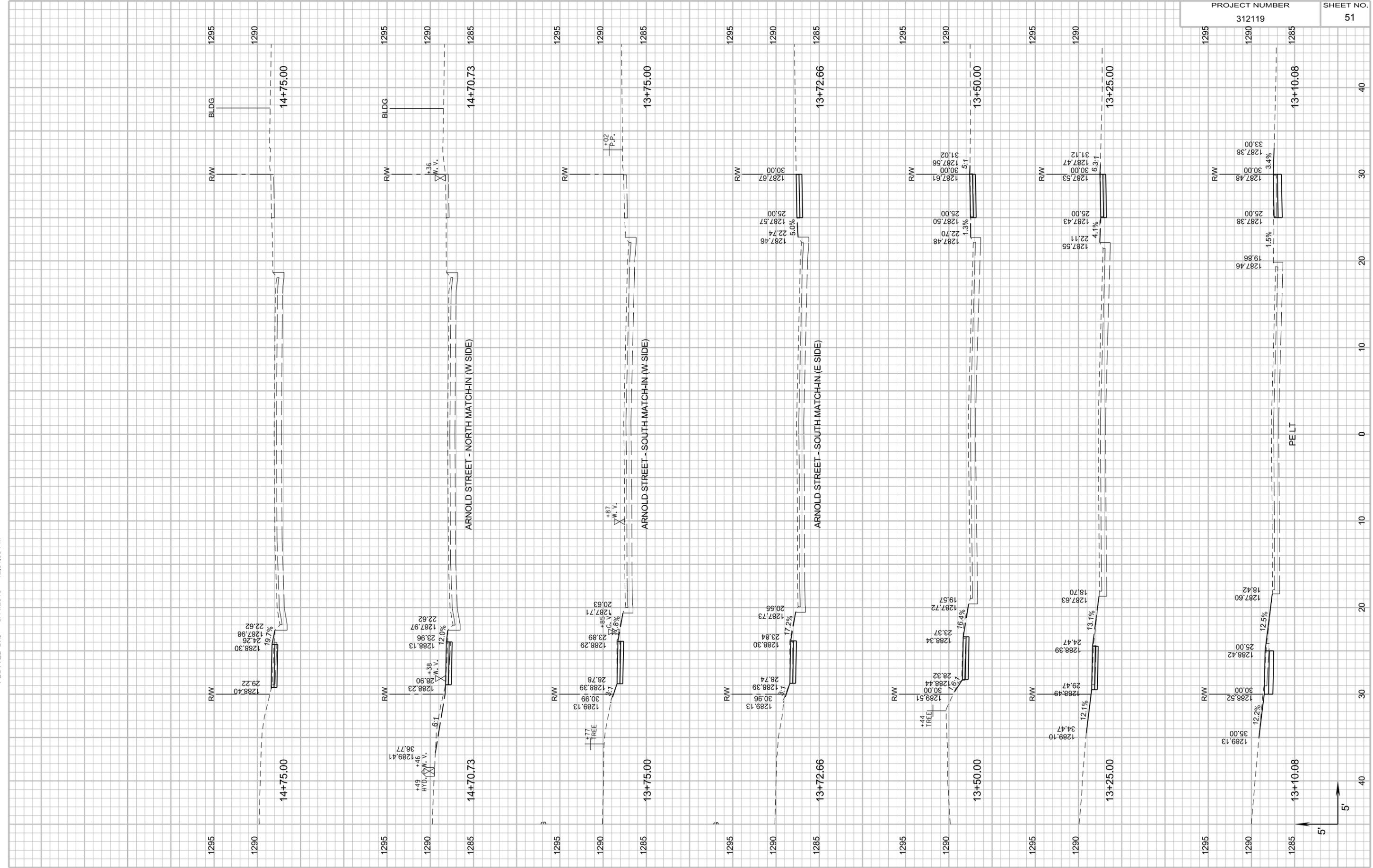
PLOTTED ON: 3/11/2016 12:51:01 PM

FILE NAME: F:\Home\PW\CAD\FILES\3590\3590_701.dgn

3590-5

OAK AVENUE STA. 11+75.00 TO STA. 13+00.00

PROJECT NUMBER	312119	SHEET NO.	51
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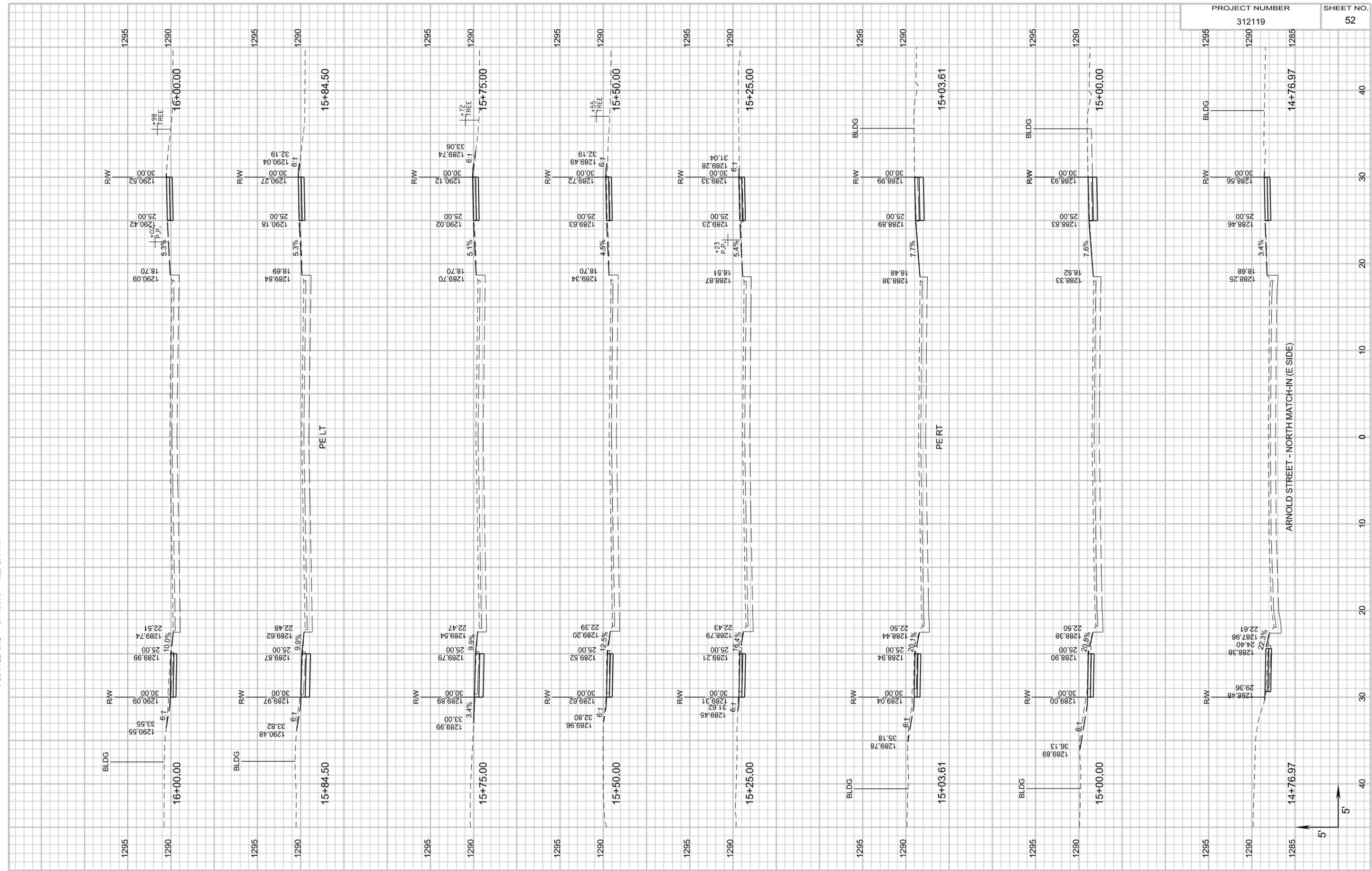


PLOTTED ON: 3/11/2016 12:51:03 PM

FILE NAME: F:\Home\PW\CAD\FILES\3590\3590_701.dgn

3590-6

OAK AVENUE STA. 13+10.08 TO STA. 14+75.00



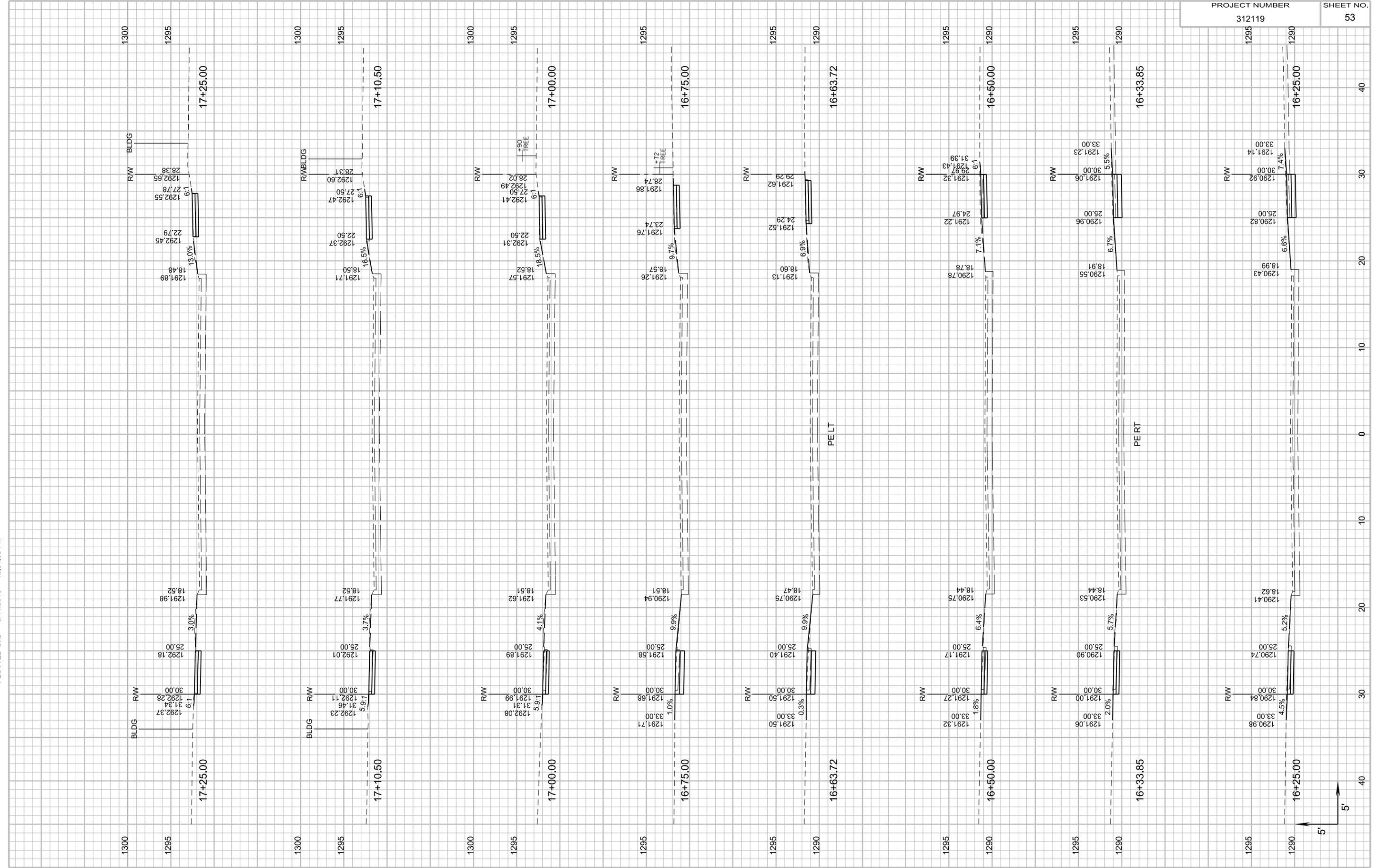
PROJECT NUMBER	312119	SHEET NO.	52
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PLOTTED ON: 3/11/2016 12:51:04 PM

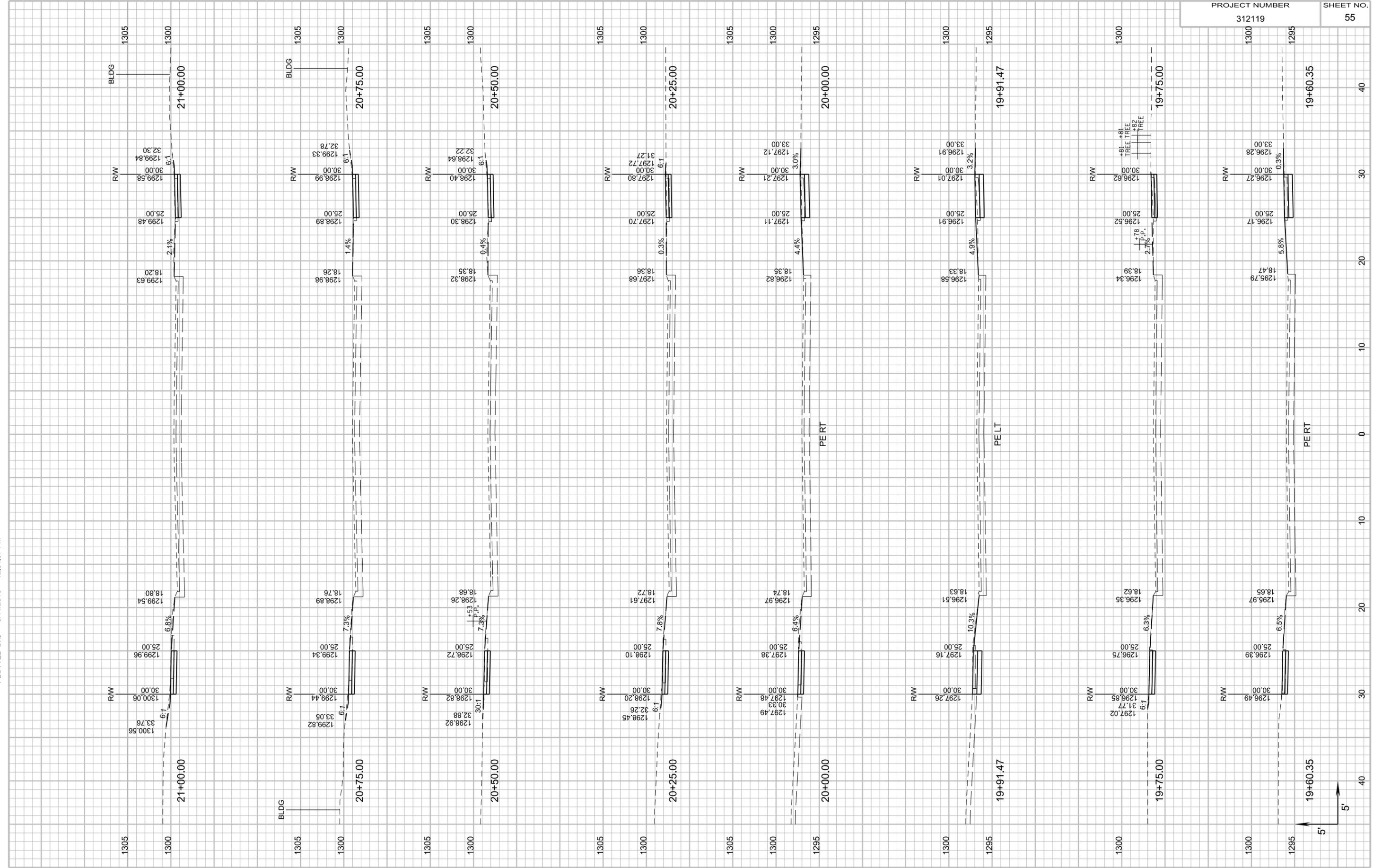
FILE NAME: F:\Home\PW\CAD\FILES\3590\3590_701.dgn

3590-7

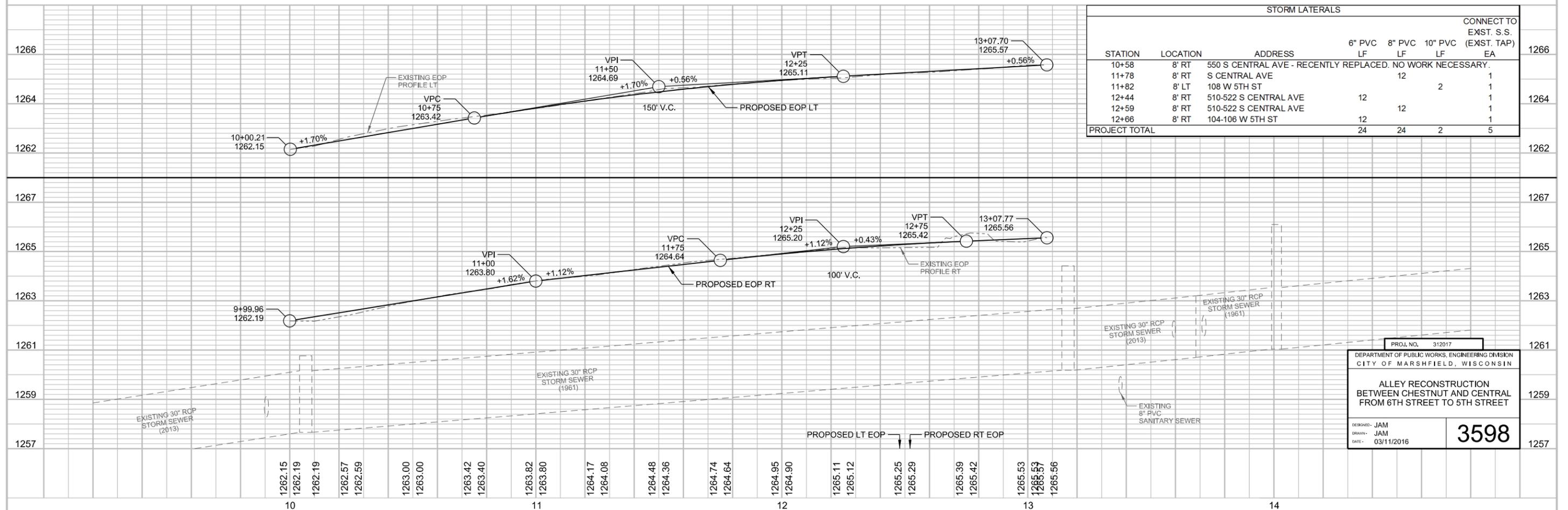
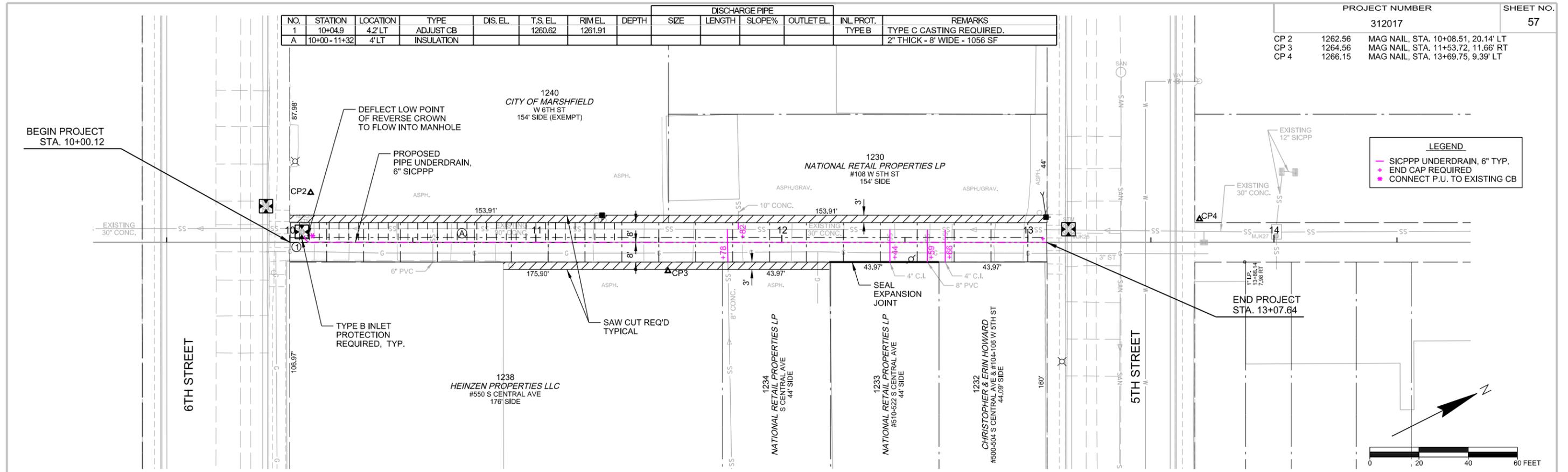
OAK AVENUE STA. 14+76.97 TO STA. 16+00.00



PLOTTED ON: 3/11/2016 12:51:05 PM



PLOTTED ON: 3/11/2016 12:51:07 PM

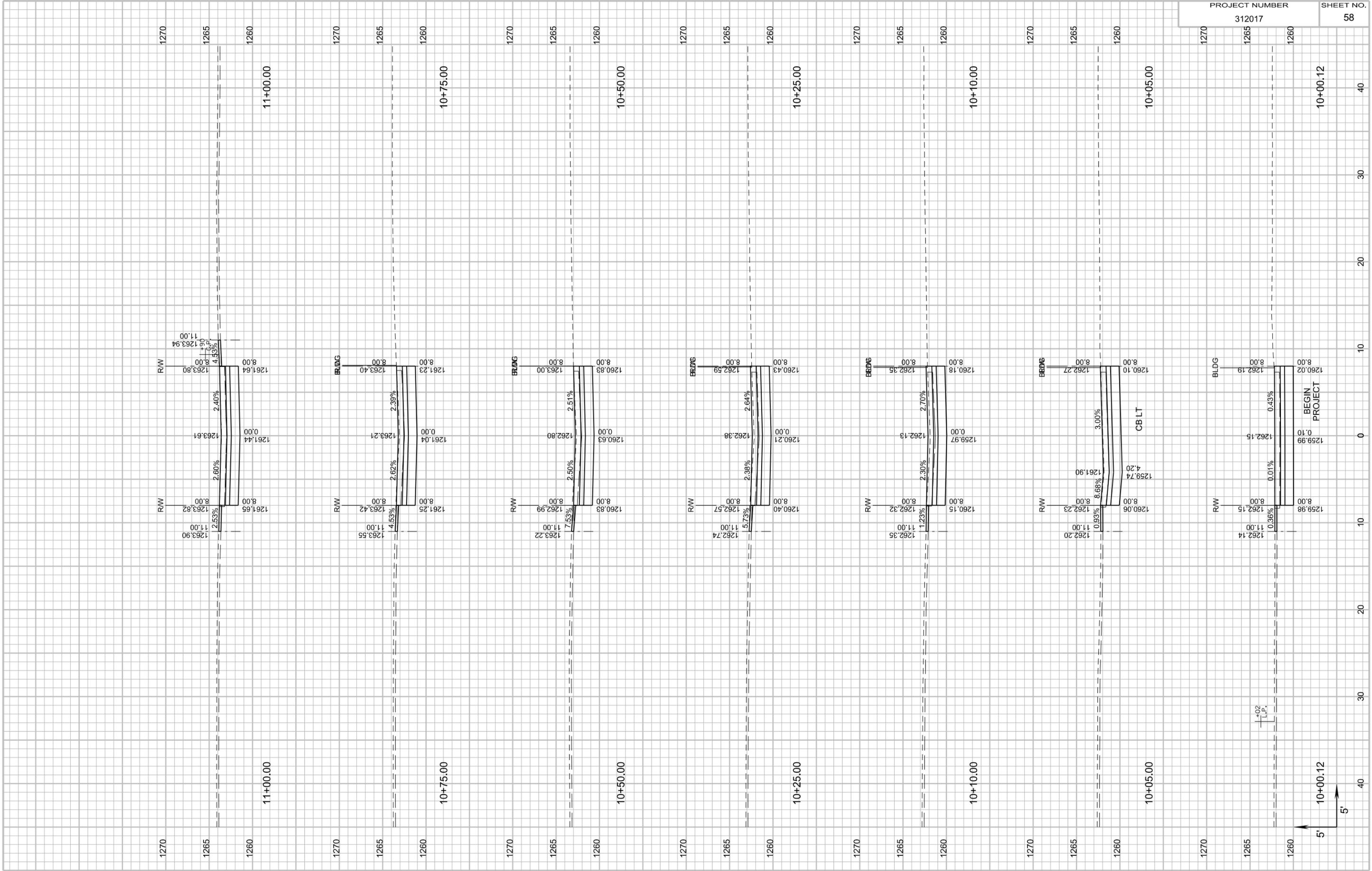


PLOTTED ON: 3/11/2016 12:51:10 PM

PROJ. NO. 312017
 DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION
 CITY OF MARSHFIELD, WISCONSIN
**ALLEY RECONSTRUCTION
 BETWEEN CHESTNUT AND CENTRAL
 FROM 6TH STREET TO 5TH STREET**
 DESIGNED: JAM
 DRAWN: JAM
 DATE: 03/11/2016

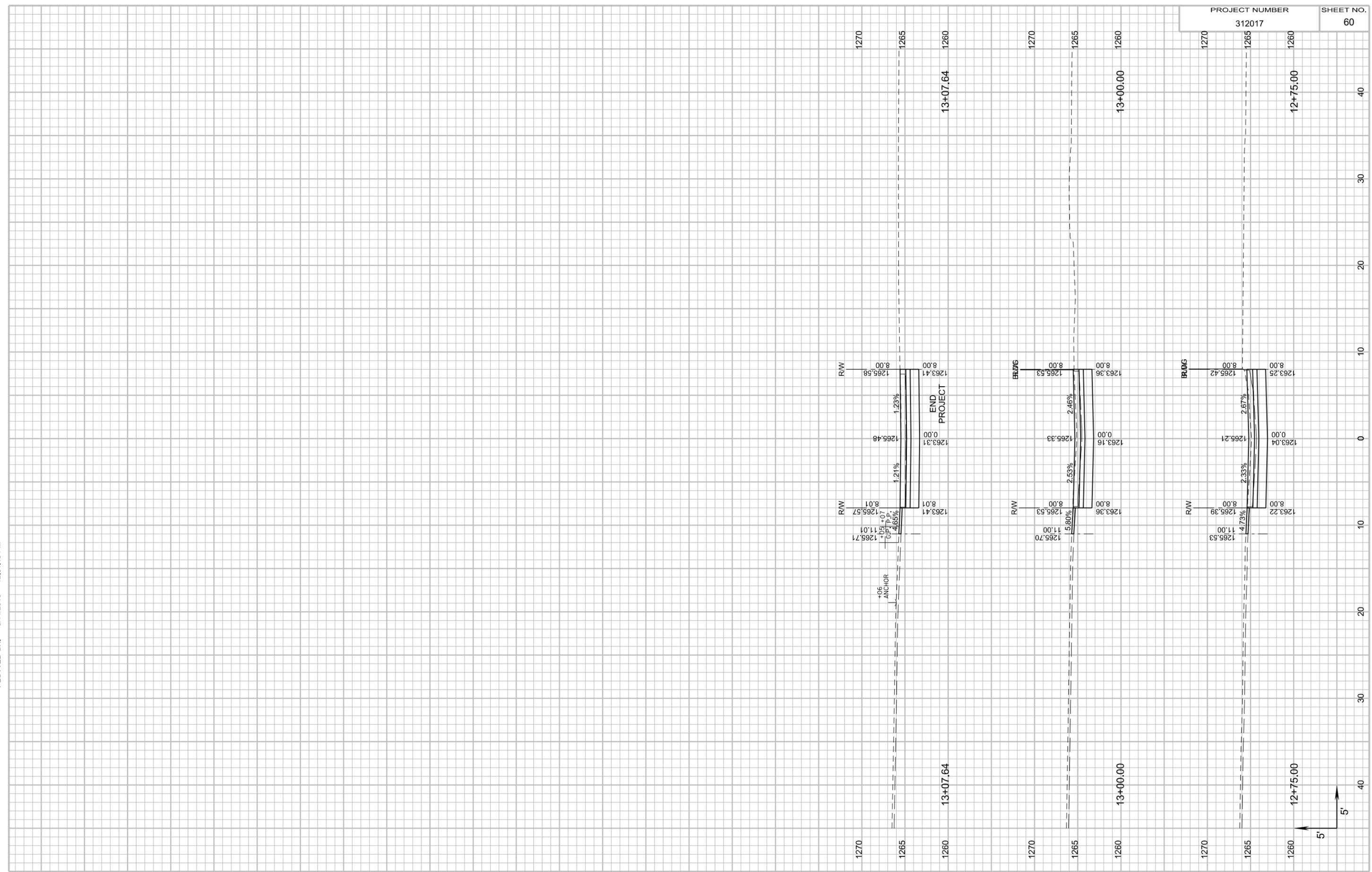
3598

PROJECT NUMBER 312017 SHEET NO. 58



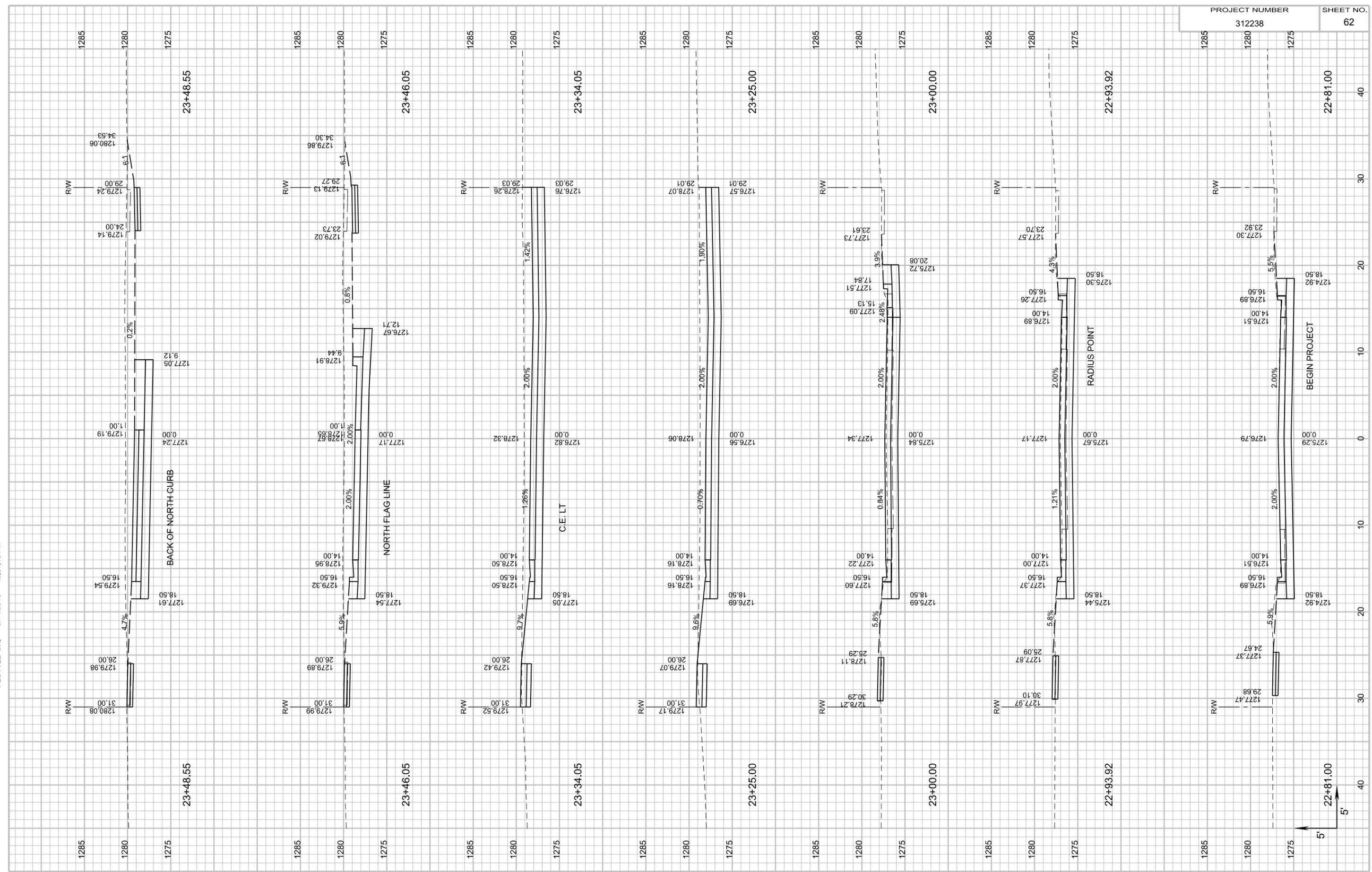
PLOTTED ON: 3/11/2016 12:51:11 PM

PROJECT NUMBER	312017	SHEET NO.	60
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PLOTTED ON: 3/11/2016 12:51:13 PM

PROJECT NUMBER	312238	SHEET NO.	62
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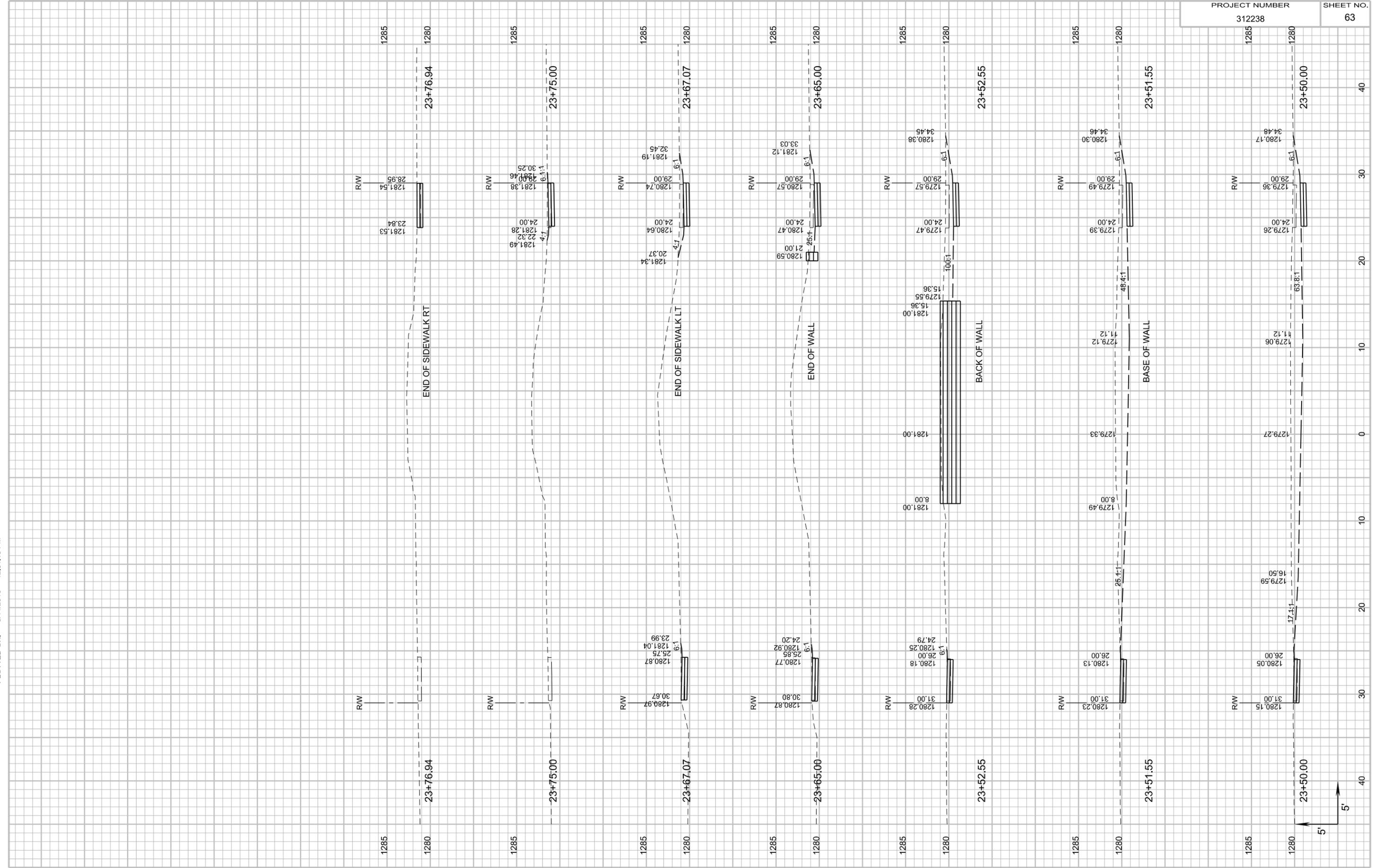
PLOTTED ON: 3/11/2016 12:51:18 PM

FILE NAME: F:\Home\PW\CAD\FILES\13599\3599_701c.dgn

3599-XS1

CEDAR AVENUE STA. 22+81.00 TO STA. 23+48.55

PROJECT NUMBER	312238	SHEET NO.	63
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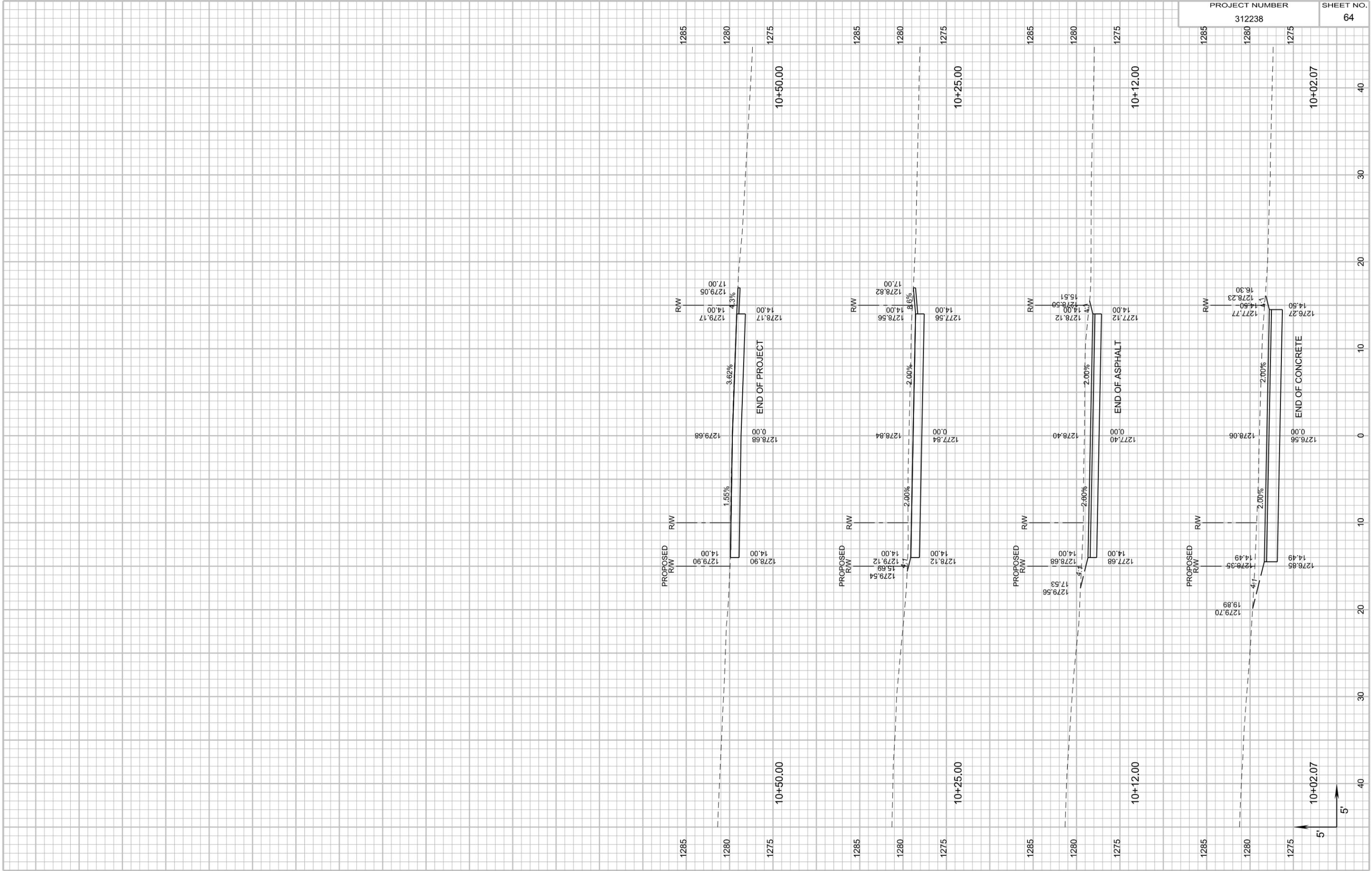
PLOTTED ON: 3/11/2016 12:51:19 PM

FILE NAME: F:\Home\PW\CAD\FILES\3599\3599_701c.dgn

3599-XS2

CEDAR AVENUE STA. 23+50.00 TO STA. 23+76.94

PROJECT NUMBER	312238	SHEET NO.	64
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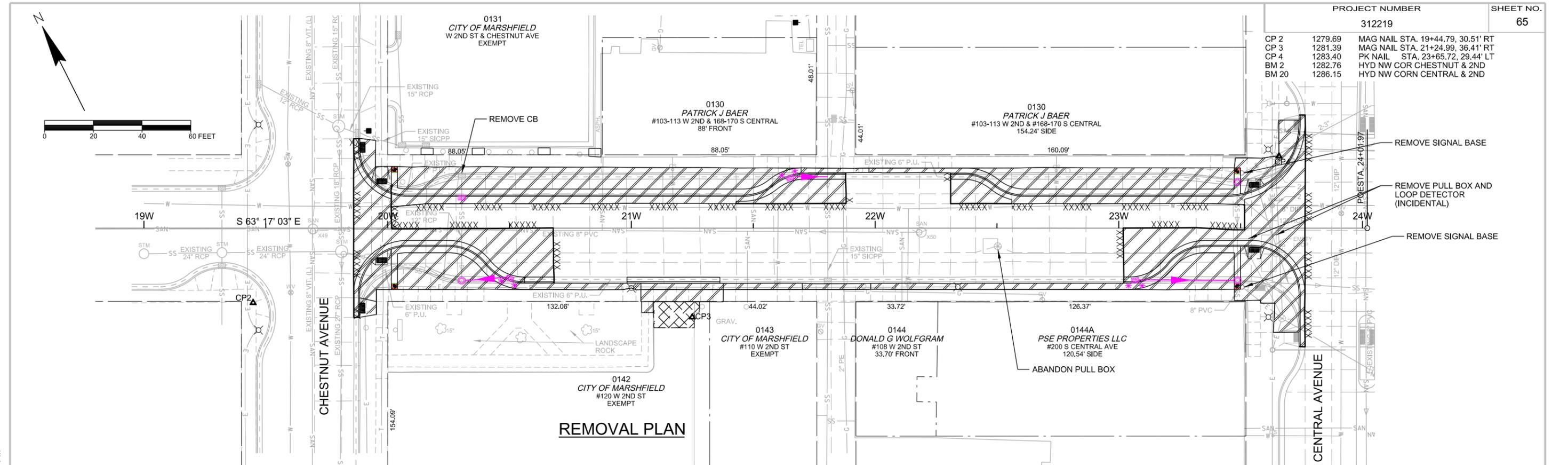


PLOTTED ON: 3/11/2016 12:51:21 PM

FILE NAME: F:\Home\PW\CAD\FILES\3599\3599_701f.dgn

3599-XS3

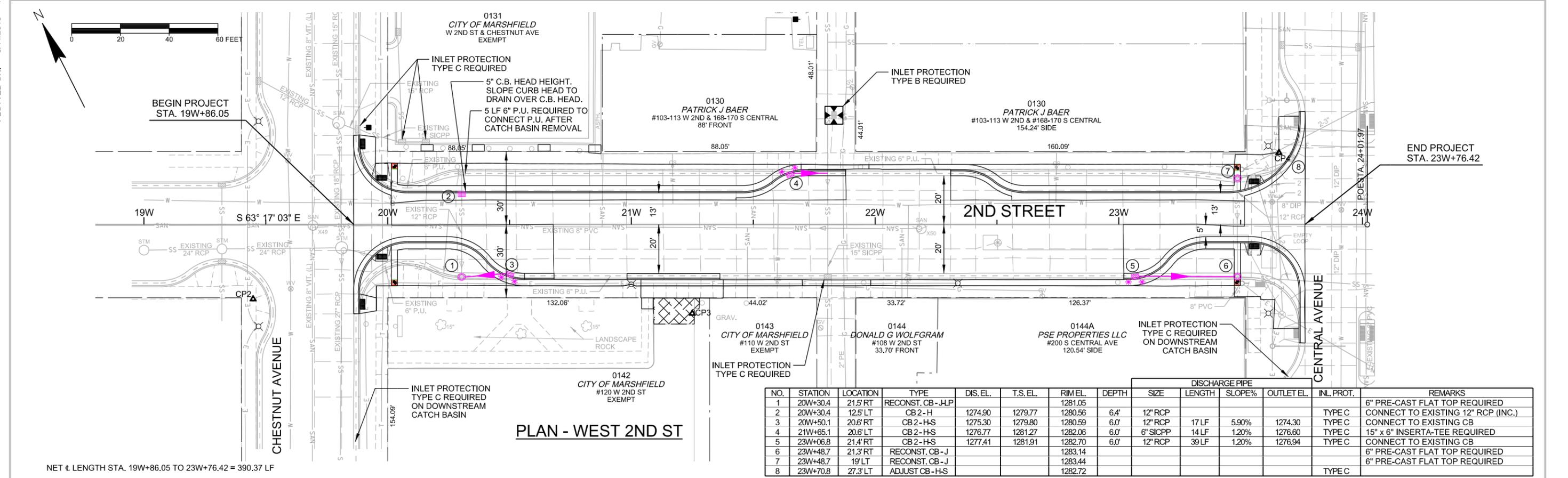
1ST STREET STA. 10+02.07 TO STA. 10+50.00



PROJECT NUMBER		SHEET NO.
312219		65

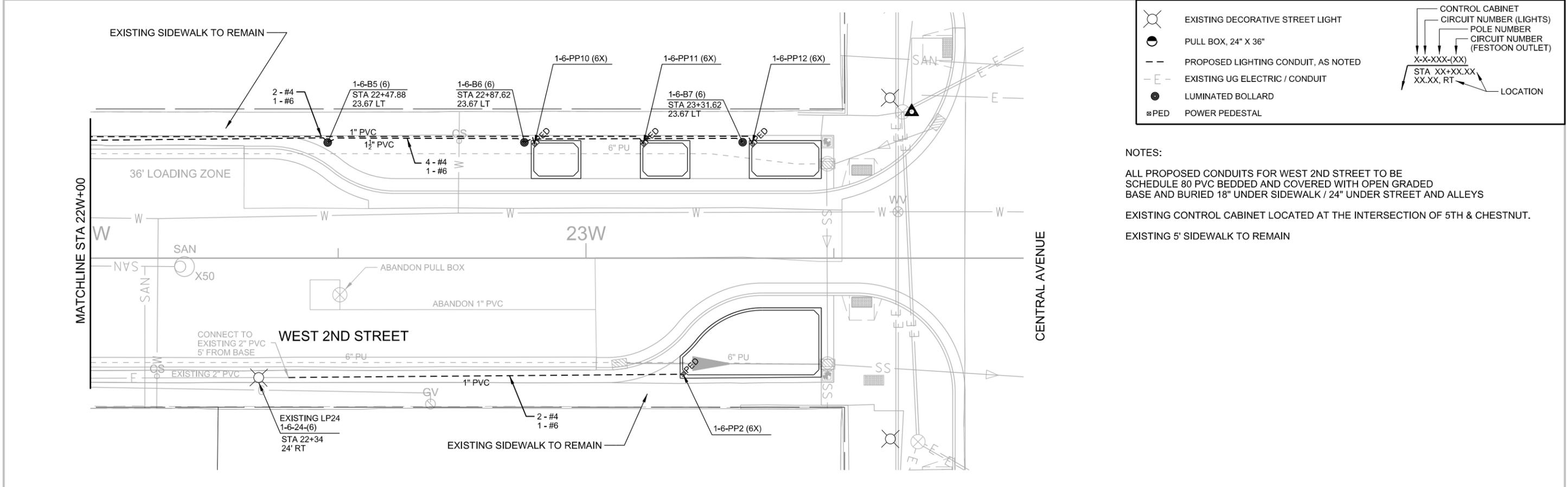
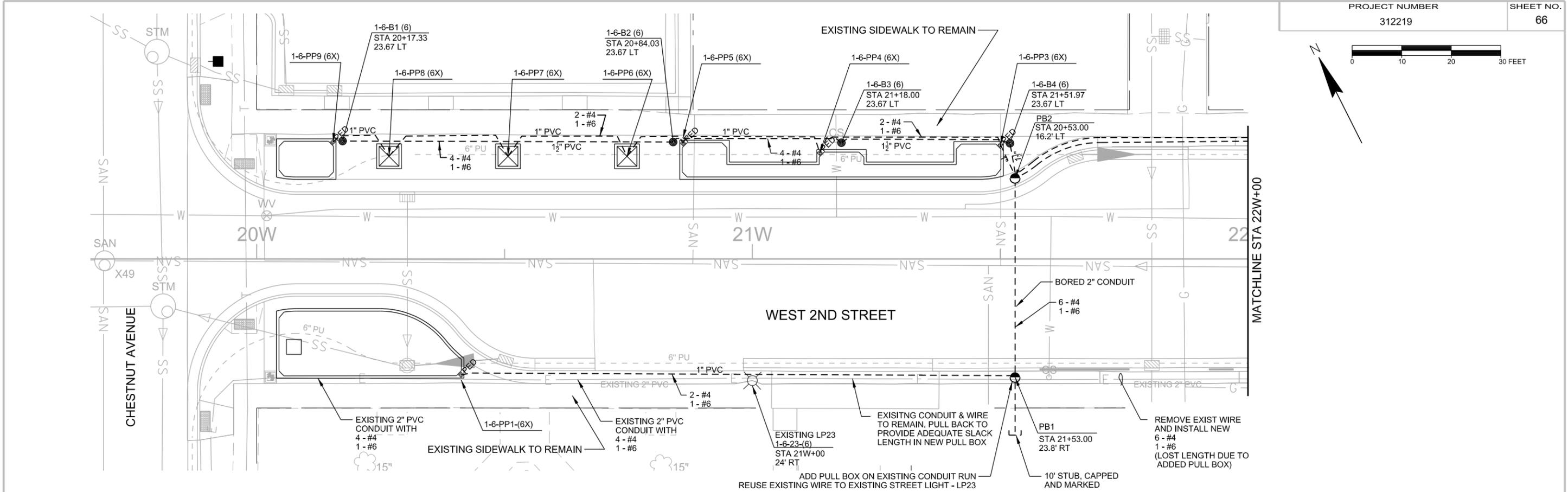
CP 2	1279.69	MAG NAIL STA. 19+44.79, 30.51' RT
CP 3	1281.39	MAG NAIL STA. 21+24.99, 36.41' RT
CP 4	1283.40	PK NAIL STA. 23+65.72, 29.44' LT
BM 2	1282.76	HYD NW COR CHESTNUT & 2ND
BM 20	1286.15	HYD NW CORN CENTRAL & 2ND

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NO.	STATION	LOCATION	TYPE	DIS. EL.	T.S. EL.	RIM EL.	DEPTH	SIZE	LENGTH	SLOPE%	OUTLET EL.	INL. PROT.	REMARKS
1	20W+30.4	21.5' RT	RECONST. CB - JLP			1281.05							6" PRE-CAST FLAT TOP REQUIRED
2	20W+30.4	12.5' LT	CB 2 - H	1274.90	1279.77	1280.56	6.4'	12" RCP					CONNECT TO EXISTING 12" RCP (INC.)
3	20W+50.1	20.6' RT	CB 2 - HS	1275.30	1279.80	1280.59	6.0'	12" RCP	17 LF	5.90%	1274.30		CONNECT TO EXISTING CB
4	21W+65.1	20.6' LT	CB 2 - HS	1276.77	1281.27	1282.06	6.0'	6" SICPP	14 LF	1.20%	1276.60		15" x 6" INSERT-A-TEE REQUIRED
5	23W+06.8	21.4' RT	CB 2 - HS	1277.41	1281.91	1282.70	6.0'	12" RCP	39 LF	1.20%	1276.94		CONNECT TO EXISTING CB
6	23W+48.7	21.3' RT	RECONST. CB - J			1283.14							6" PRE-CAST FLAT TOP REQUIRED
7	23W+48.7	19' LT	RECONST. CB - J			1283.44							6" PRE-CAST FLAT TOP REQUIRED
8	23W+70.8	27.3' LT	ADJUST CB - HS			1282.72							6" PRE-CAST FLAT TOP REQUIRED

NET & LENGTH STA. 19W+86.05 TO 23W+76.42 = 390.37 LF



	EXISTING DECORATIVE STREET LIGHT		CONTROL CABINET
	PULL BOX, 24" X 36"		CIRCUIT NUMBER (LIGHTS)
	PROPOSED LIGHTING CONDUIT, AS NOTED		POLE NUMBER
	EXISTING UG ELECTRIC / CONDUIT		CIRCUIT NUMBER (FESTOON OUTLET)
	LUMINAED BOLLARD		LOCATION
	POWER PEDESTAL		

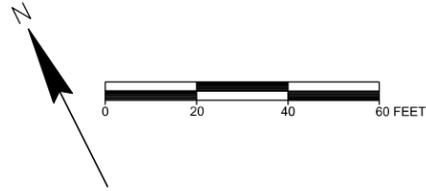
NOTES:

ALL PROPOSED CONDUITS FOR WEST 2ND STREET TO BE SCHEDULE 80 PVC BEDDED AND COVERED WITH OPEN GRADED BASE AND BURIED 18" UNDER SIDEWALK / 24" UNDER STREET AND ALLEYS

EXISTING CONTROL CABINET LOCATED AT THE INTERSECTION OF 5TH & CHESTNUT.

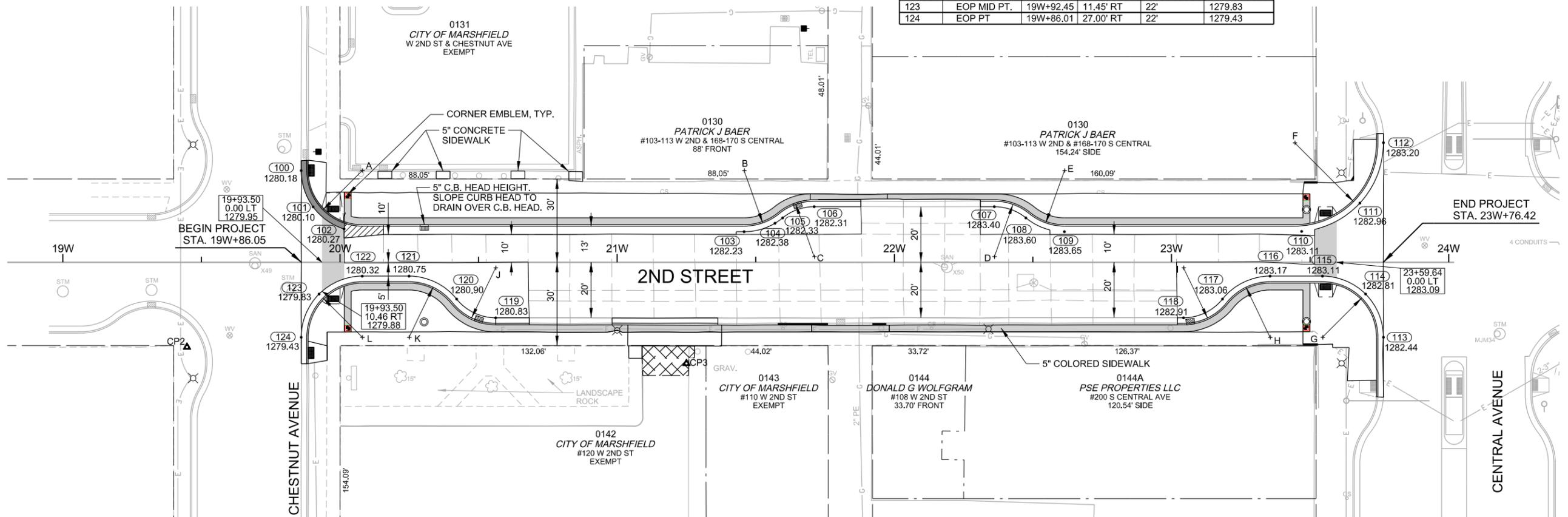
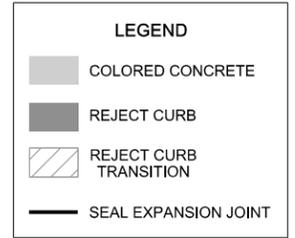
EXISTING 5' SIDEWALK TO REMAIN

PLOTTED ON: 3/11/2016 12:51:25 PM

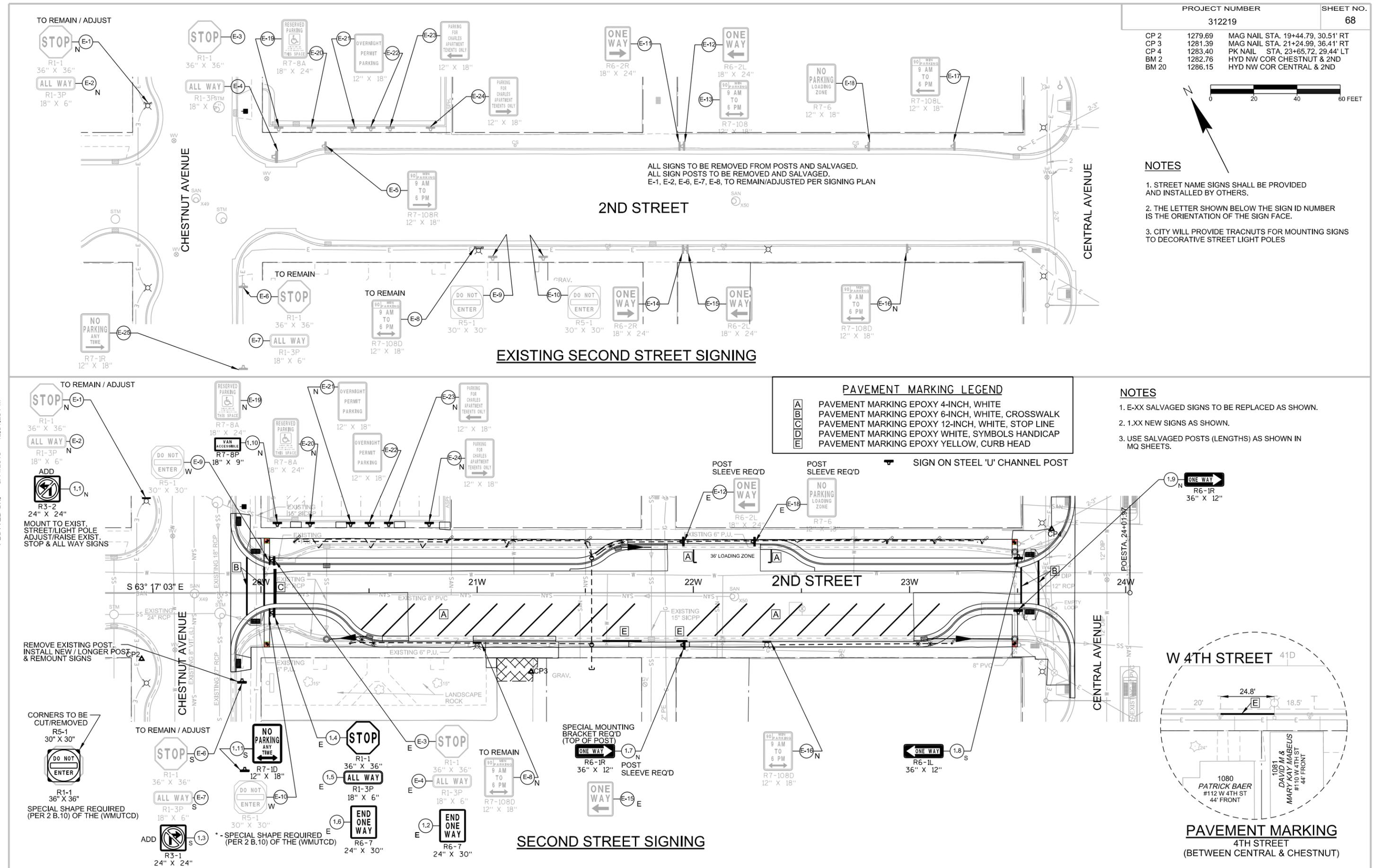


RADIUS POINTS (TO FACE OF CURB)				
+	RADIUS	CHAIN	STATION	OFFSET
A	20'	W	20W+07.99	33.00' LT
B	20'	W	21W+45.81	33.00' LT
C	20'	W	21W+71.08	2.00' LT
D	20'	W	22W+36.08	2.00' LT
E	20'	W	22W+61.36	33.00' LT
F	30'	W	23W+44.47	43.00' LT
G	20'	W	23W+54.48	27.00' RT
H	20'	W	23W+35.57	27.00' RT
I	20'	W	23W+04.34	2.00' RT
J	20'	W	20W+56.14	2.00' RT
K	20'	W	20W+24.91	27.00' RT
L	20'	W	20W+08.01	27.00' RT

POINT	DESCRIPTION	STATION	OFFSET	RADIUS	ELEVATION
100	EOP PC	19W+85.99	33.00' LT	22'	1280.18
101	EOP MID PT.	19W+90.28	19.95' LT	22'	1280.10
102	EOP PT	20W+01.48	11.99' LT	22'	1280.27
103	EOP PC	21W+45.81	11.00' LT	22'	1282.23
104	EOP H.P.	21W+56.93	14.02' LT	18'/22'	1282.38
105	EOP PT/PC	21W+59.71	15.95' LT	18'/22'	1282.33
106	EOP PT	21W+71.08	20.00' LT	18'	1282.31
107	EOP PC	22W+36.08	20.00' LT	18'	1283.40
108	EOP PT/PC	22W+47.45	15.95' LT	18'/22'	1283.60
109	EOP PT	22W+61.36	11.00' LT	22'	1283.65
110	EOP PC	23W+46.97	11.10' LT	32'	1283.11
111	EOP MID PT.	23W+67.96	21.27' LT	32'	1282.96
112	EOP PT	23W+76.47	43.00' LT	32'	1283.20
113	EOP PC	23W+76.48	27.00' RT	22'	1282.44
114	EOP MID PT.	23W+70.03	11.44' RT	22'	1282.81
115	EOP PT	23W+54.48	5.00' RT	22'	1283.11
116	EOP PC	23W+35.57	5.00' RT	22'	1283.17
117	EOP PT/PC	23W+18.39	13.25' RT	18'/22'	1283.06
118	EOP PT	23W+04.34	20.00' RT	18'	1282.91
119	EOP PC	20W+56.14	20.00' RT	18'	1280.83
120	EOP PT/PC	20W+42.09	13.25' RT	18'/22'	1280.90
121	EOP PT	20W+24.91	5.00' RT	22'	1280.75
122	EOP PC	20W+08.01	5.00' RT	22'	1280.32
123	EOP MID PT.	19W+92.45	11.45' RT	22'	1279.83
124	EOP PT	19W+86.01	27.00' RT	22'	1279.43



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PROJECT NUMBER		SHEET NO.
312219		68
CP 2	1279.69	MAG NAIL STA. 19+44.79, 30.51' RT
CP 3	1281.39	MAG NAIL STA. 21+24.99, 36.41' RT
CP 4	1283.40	PK NAIL STA. 23+65.72, 29.44' LT
BM 2	1282.76	HYD NW COR CHESTNUT & 2ND
BM 20	1286.15	HYD NW COR CENTRAL & 2ND

- NOTES**
1. STREET NAME SIGNS SHALL BE PROVIDED AND INSTALLED BY OTHERS.
 2. THE LETTER SHOWN BELOW THE SIGN ID NUMBER IS THE ORIENTATION OF THE SIGN FACE.
 3. CITY WILL PROVIDE TRACNUTS FOR MOUNTING SIGNS TO DECORATIVE STREET LIGHT POLES

PAVEMENT MARKING LEGEND

A	PAVEMENT MARKING EPOXY 4-INCH, WHITE
B	PAVEMENT MARKING EPOXY 6-INCH, WHITE, CROSSWALK
C	PAVEMENT MARKING EPOXY 12-INCH, WHITE, STOP LINE
D	PAVEMENT MARKING EPOXY WHITE, SYMBOLS HANDICAP
E	PAVEMENT MARKING EPOXY YELLOW, CURB HEAD

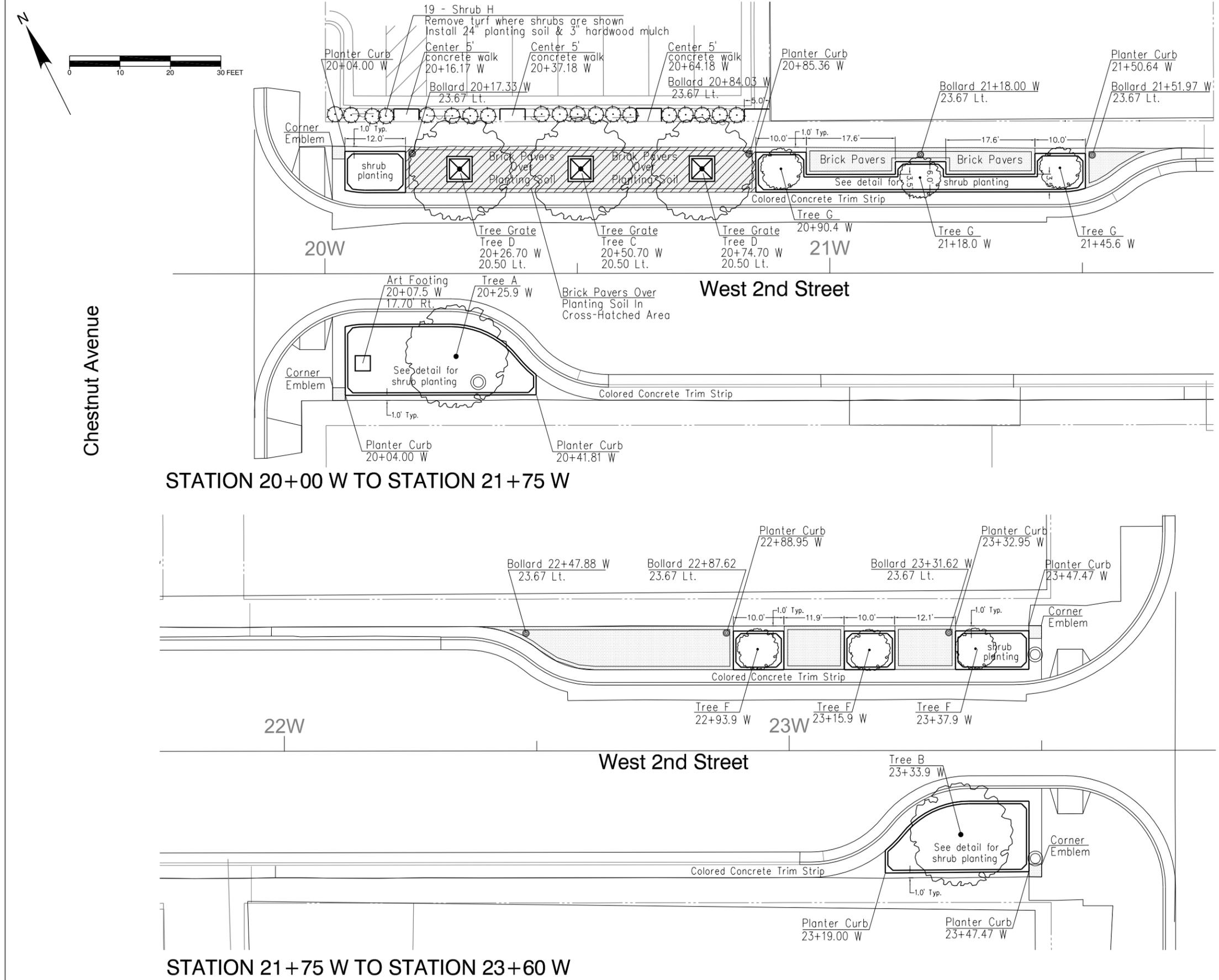
- NOTES**
1. E-XX SALVAGED SIGNS TO BE REPLACED AS SHOWN.
 2. 1.XX NEW SIGNS AS SHOWN.
 3. USE SALVAGED POSTS (LENGTHS) AS SHOWN IN MQ SHEETS.

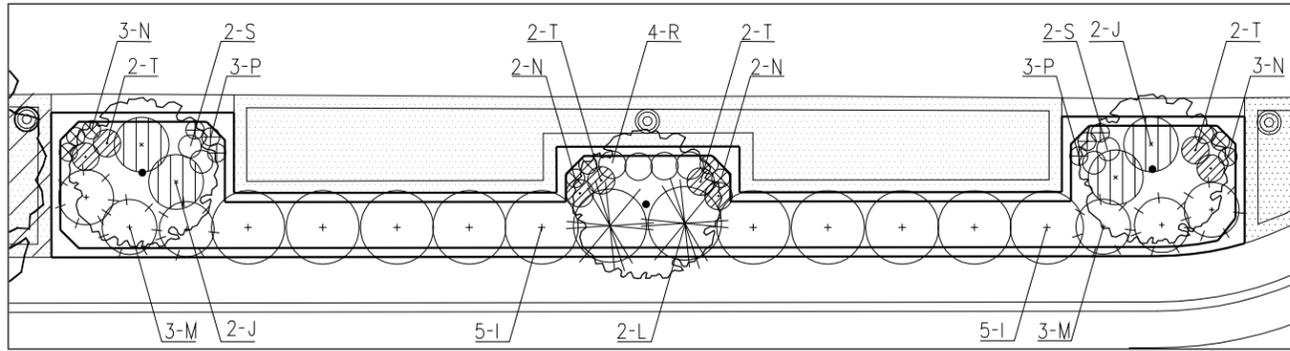
PLOTTED ON: 3/11/2016 12:51:28 PM

PROJECT NUMBER 312219	SHEET NO. 69
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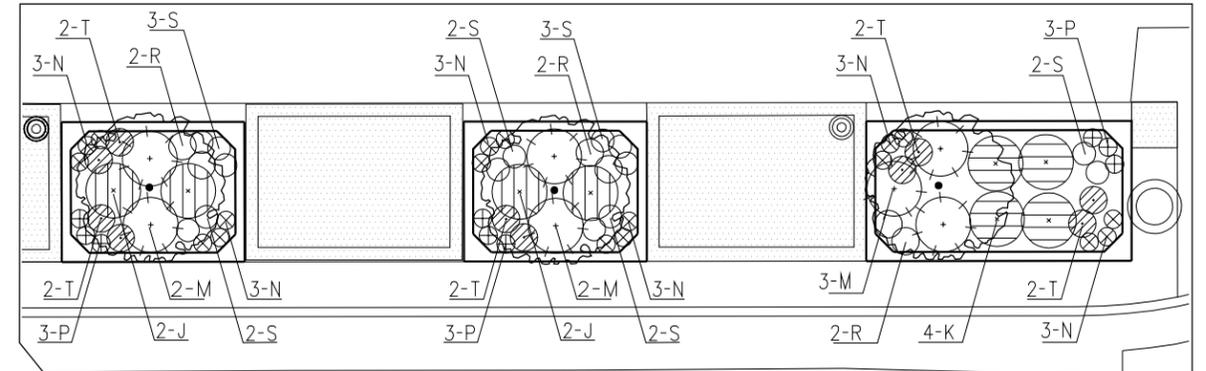
TREE PLANTING SCHEDULE
Quantities shown are for this sheet only

key	common name/botanical name	size	no.	root
A	Red Oak <i>Quercus rubra</i>	4"	1	b & b
B	'Autumn Gold' Ginkgo <i>Ginkgo biloba</i> 'Autumn Gold'	4"	1	b & b
C	'Skyline' Honeylocust <i>Gleditsia triacanthos</i> 'Skyline'	5"	1	b & b
D	Swamp White Oak <i>Quercus bicolor</i>	5"	2	b & b
E	Prairiefire Crabapple <i>Malus</i> 'Prairiefire'	2.5"	0	b & b
F	Ivory Silk Japanese Tree Lilac <i>Syringa reticulata</i> 'Ivory Silk'	2.5"	3	b & b
G	Autumn Brilliance Serviceberry <i>Amelanchier grand.</i> 'Autumn Brilliance'	8"	3	b & b multi stem
H	'Skyrocket' Juniper <i>Juniperus scopulorum</i> 'Skyrocket'	36"	19	b & b



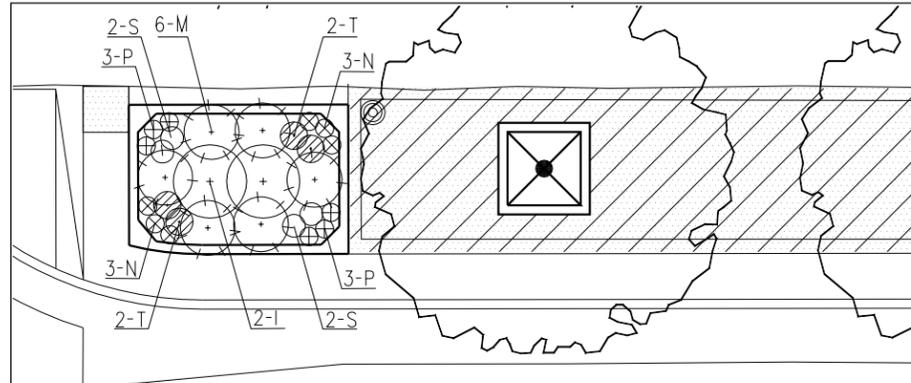


STATION 20+80 W to STATION 21+55 W

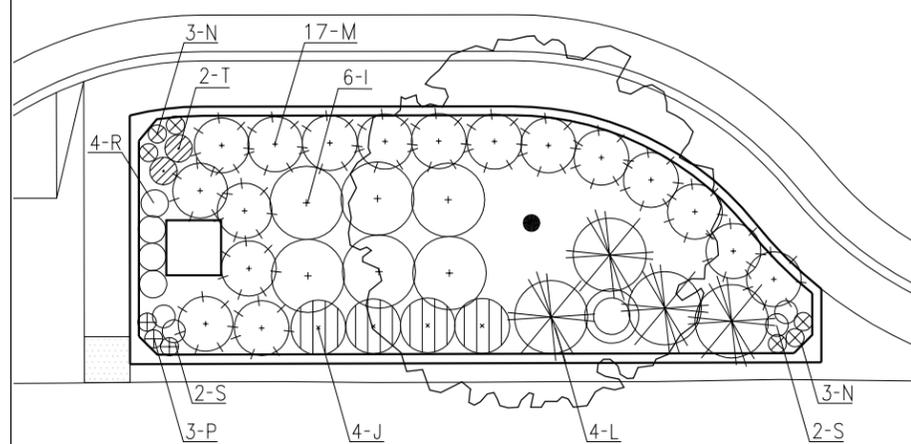


23+00 W

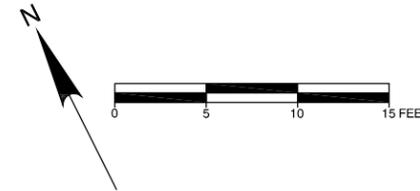
23+



20+00 W



STATION 20+00 W to STATION 20+50 W



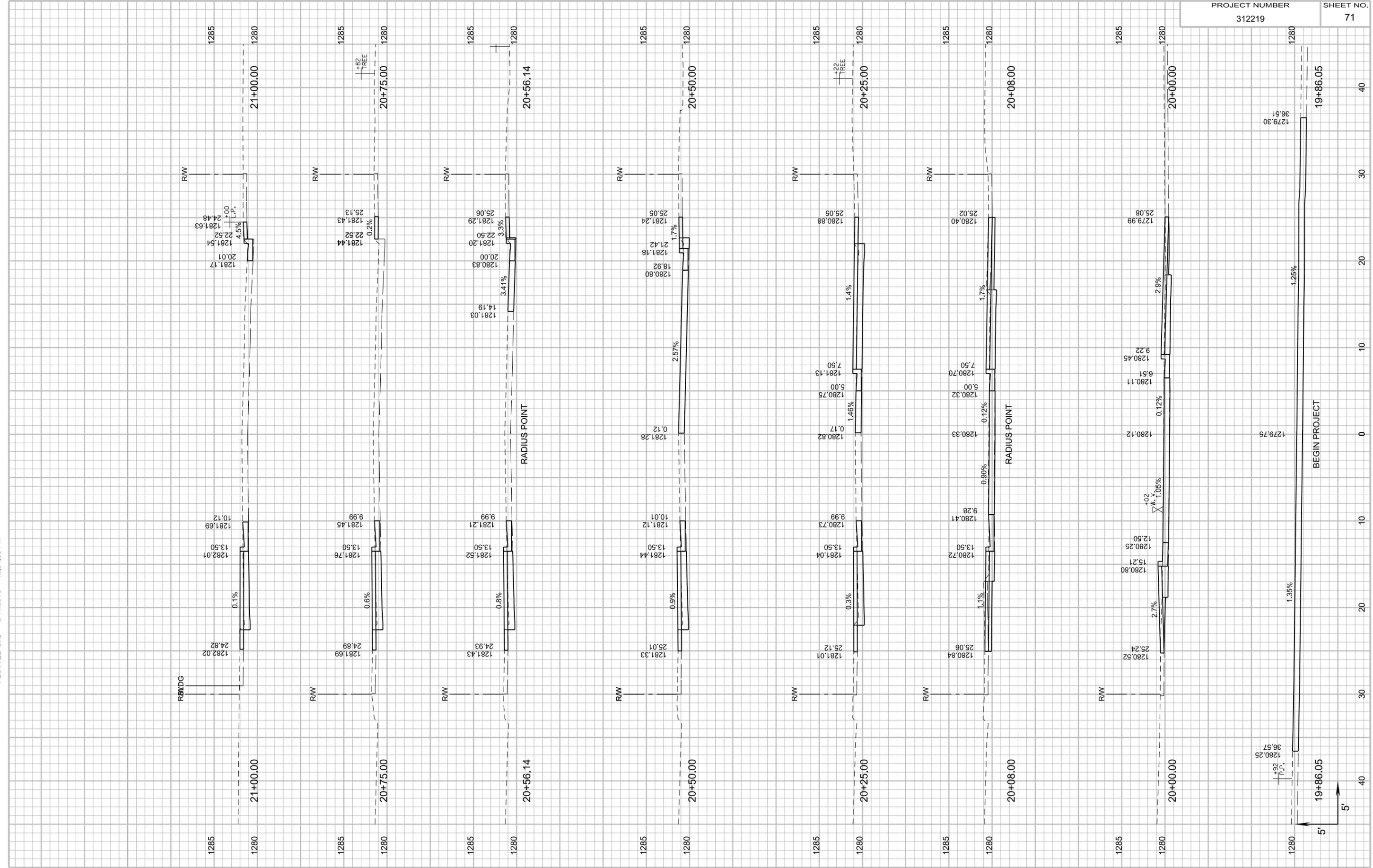
SHRUB & PERENNIAL PLANTING SCHEDULE

Quantities shown are for this sheet only

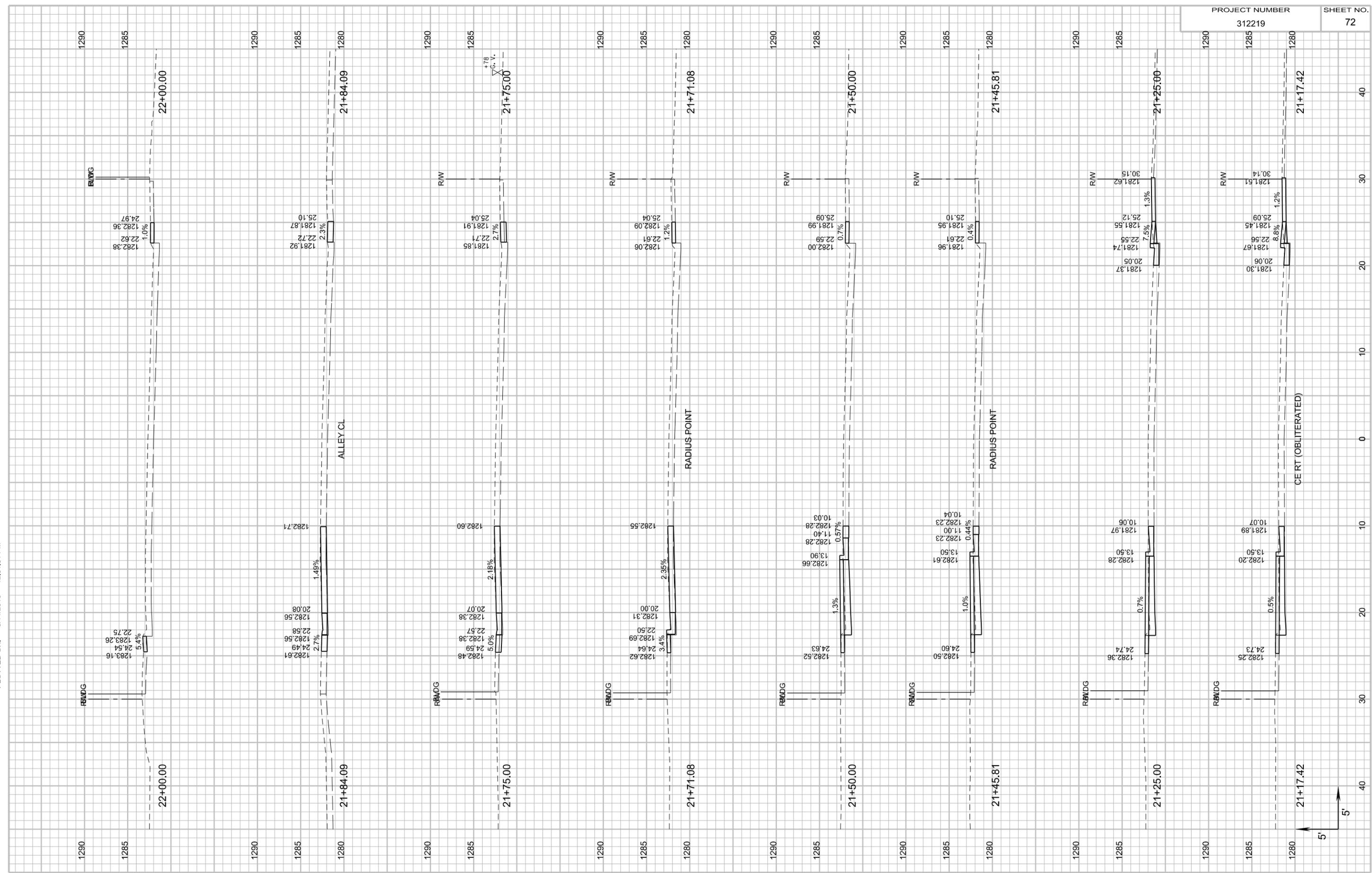
key	common name/botanical name	size	no.	root
I	Black Chokeberry <i>Aronia melanocarpa var. elata</i>	#5	24	container
J	Neon Flash Spirea <i>Spiraea japonica 'Neon Flash'</i>	#3	15	container
K	Little Devil Ninebark <i>Physocarpus opulifolius 'Little Devil'</i>	#5	4	container
L	Seagreen Juniper <i>Juniperus chinensis 'Seagreen'</i>	#5	10	container
M	Broadmoor Juniper <i>Juniperus sabina 'Broadmoor'</i>	#5	46	container
N	Stella D' Oro Daylily <i>Hemerocallis 'Stella de Oro'</i>	#1	46	container
P	'Pardon Me' Daylily <i>Hemerocallis 'Pardon Me'</i>	#1	27	container
R	'Red Volunteer' Daylily <i>Hemerocallis 'Red Volunteer'</i>	#1	14	container
S	'Goldsturm' Black Eyed Susan <i>Rudbeckia fulgida 'Goldstrum'</i>	#1	28	container
T	'Autumn Joy' Sedum <i>Sedum telephium 'Autumn Joy'</i>	#1	28	container

STATION 22+85 W to STATION 23+50 W





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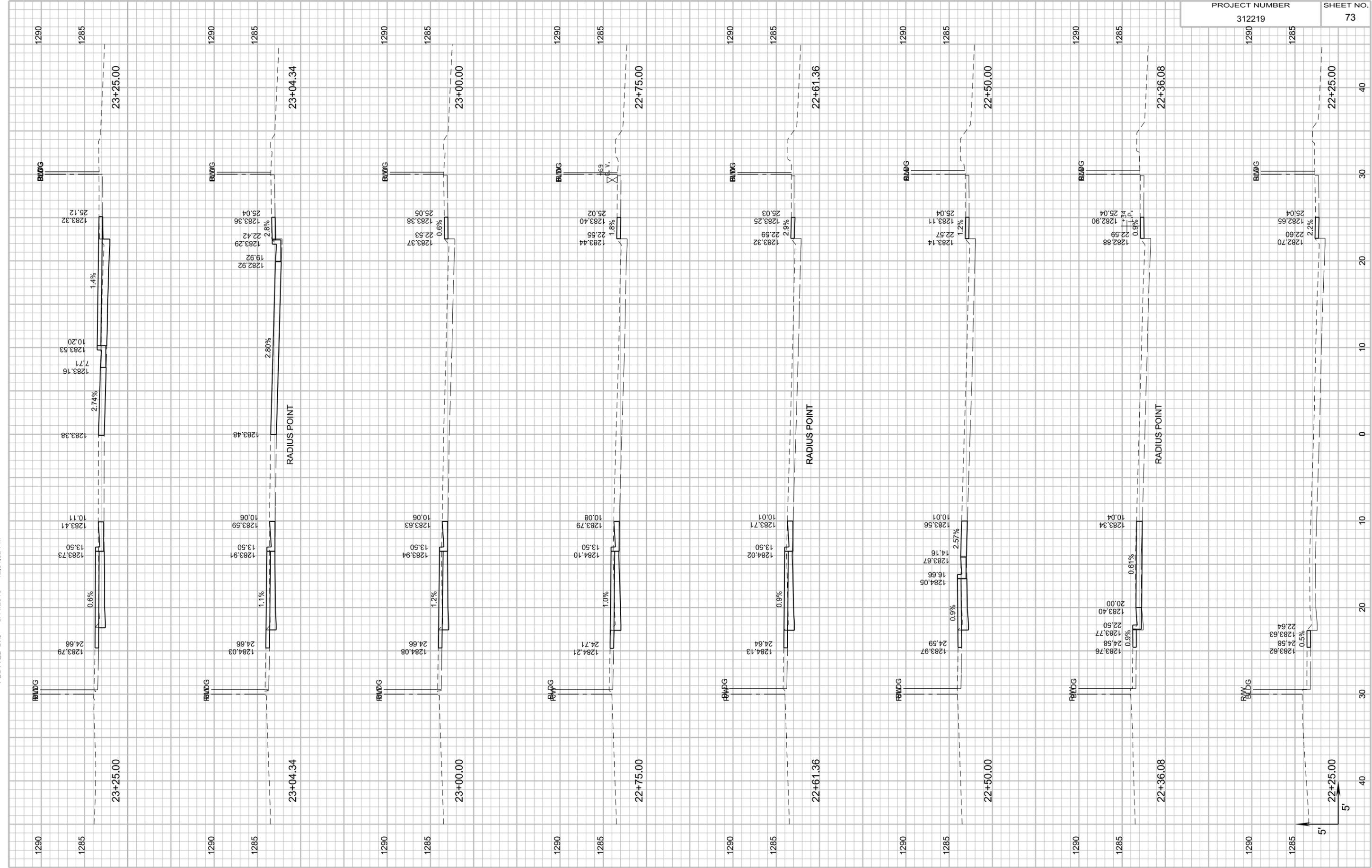


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3600-XS2

WEST 2ND STREET STA. 21+17.42 TO STA. 22+00.00



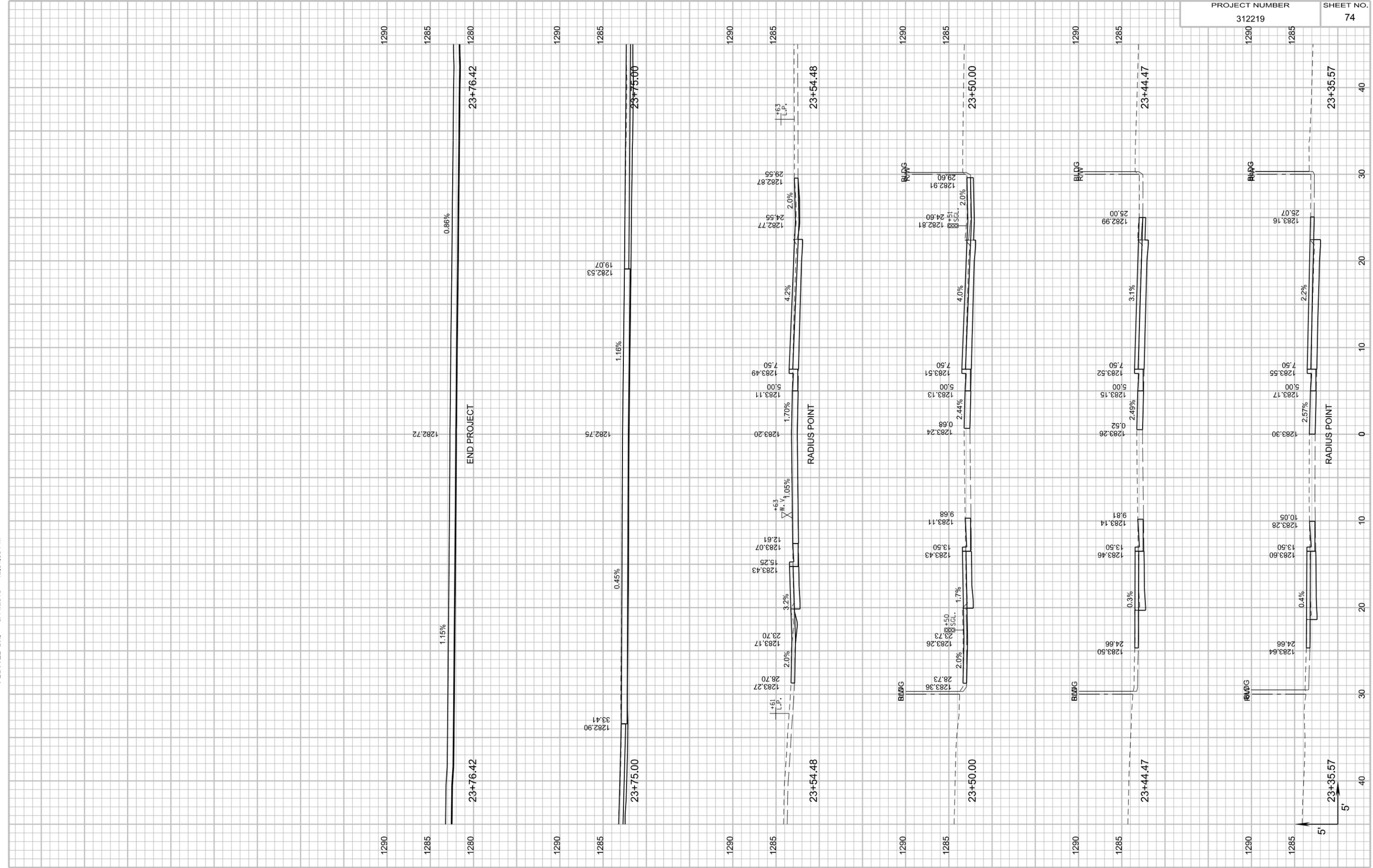
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FILE NAME: F:\Home\PW\CAD\FILES\3600\3600_701w.dgn

3600-XS3

WEST 2ND STREET STA. 22+25.00 TO STA. 23+25.00

PROJECT NUMBER	312219	SHEET NO.	74
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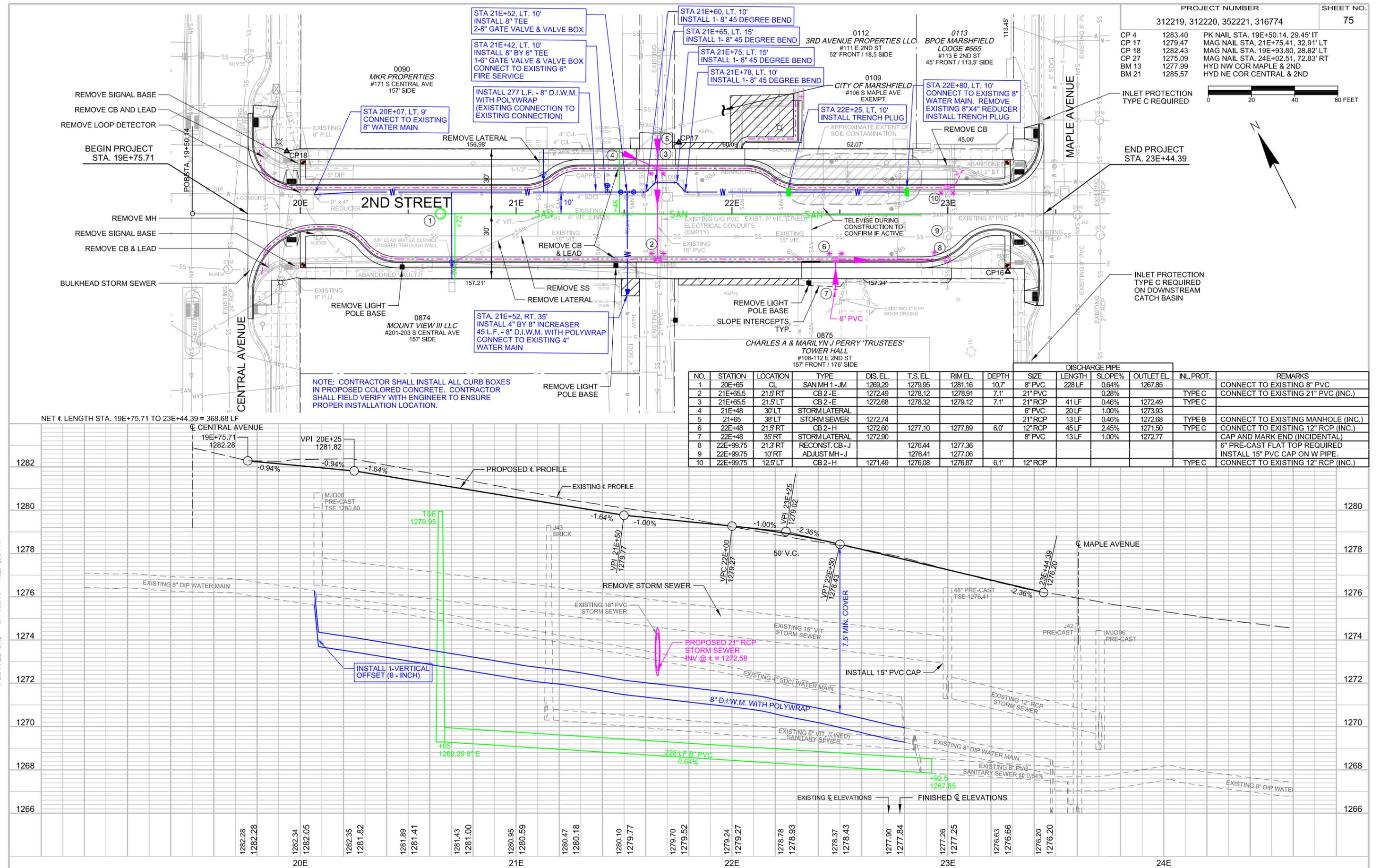


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FILE NAME: F:\Home\PW\CAD\FILES\3600\3600_701w.dgn

3600-XS4

WEST 2ND STREET STA. 23+35.57 TO STA. 23+76.42



PROJECT NUMBER		SHEET NO.
312219, 312220, 352221, 316774		75

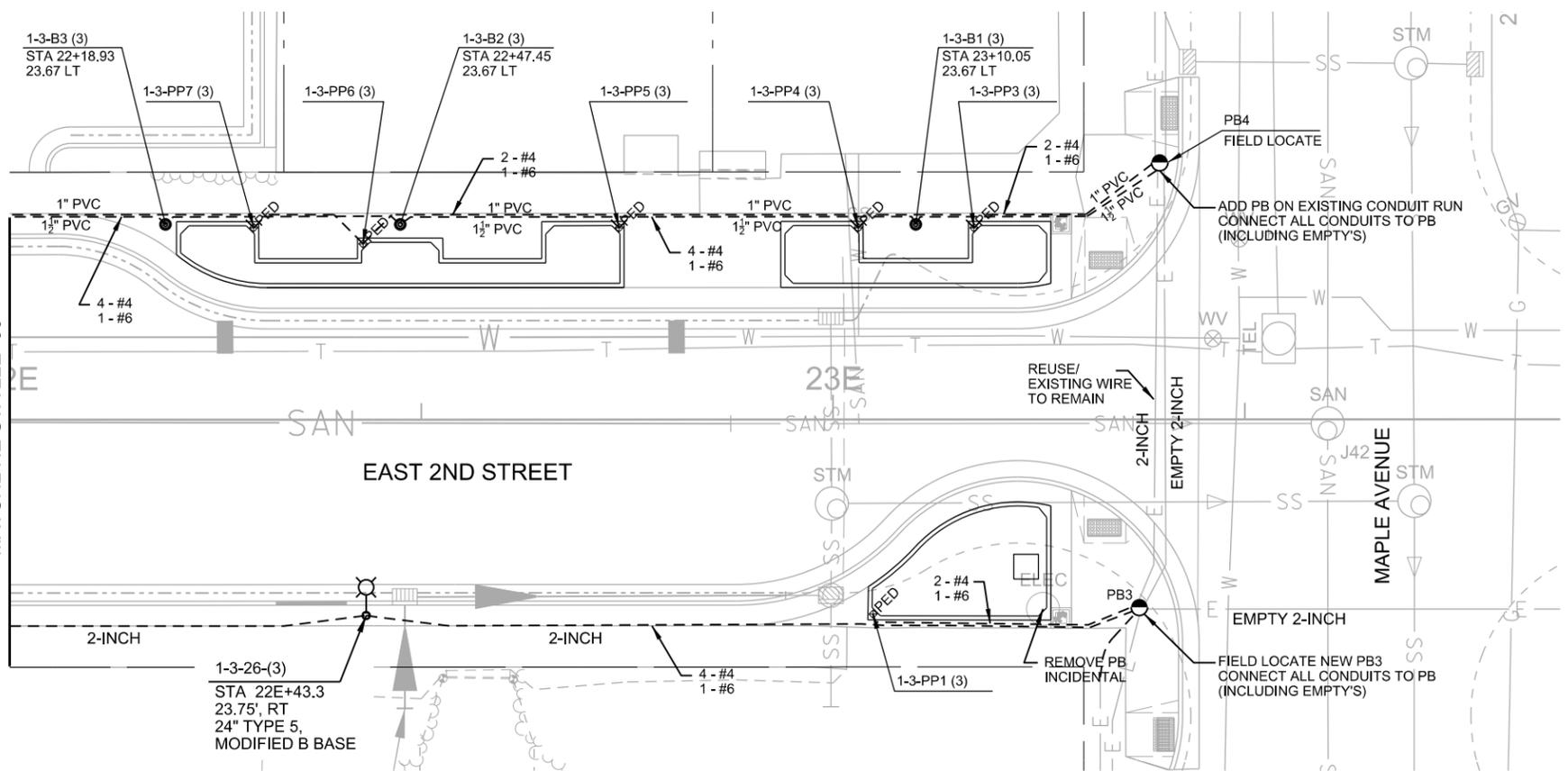
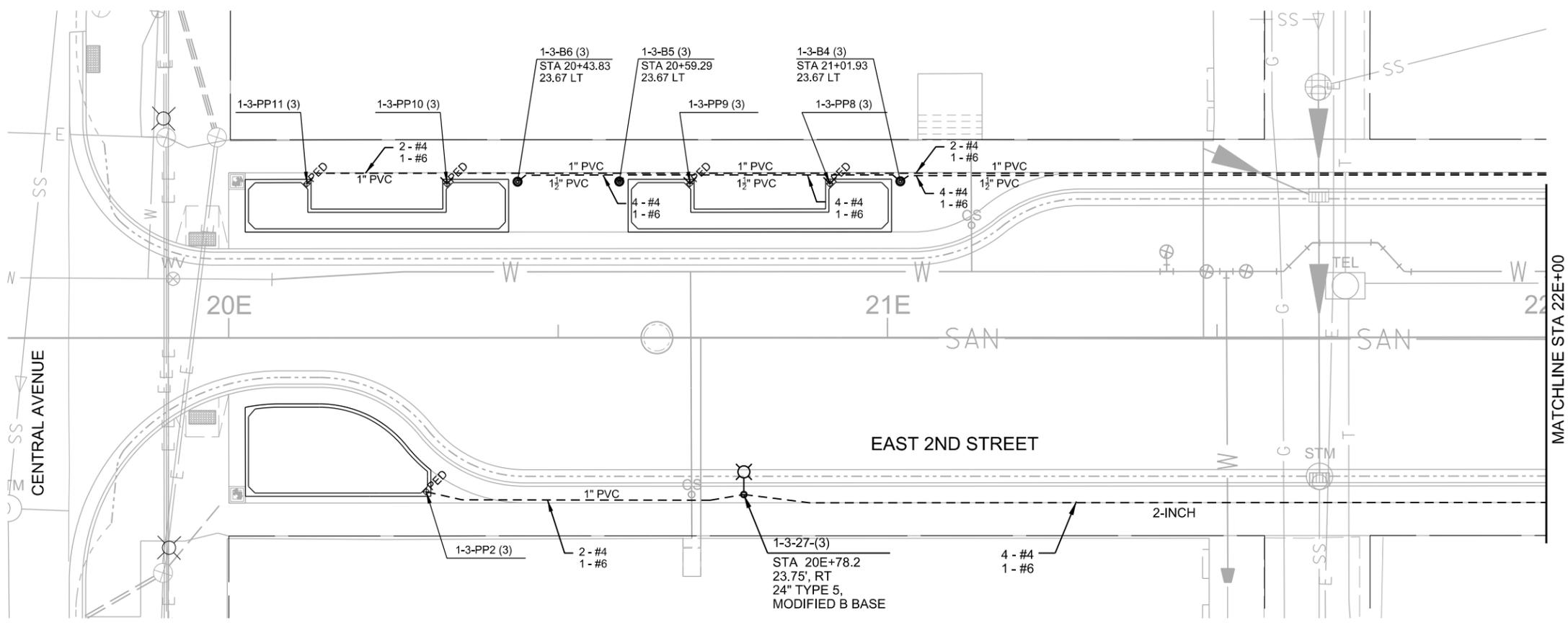
CP 4	1283.40	PK NAIL STA. 19E+50.14, 29.45' IT
CP 17	1279.47	MAG NAIL STA. 21E+75.41, 32.91' LT
CP 18	1282.43	MAG NAIL STA. 19E+93.80, 28.82' LT
CP 27	1275.09	MAG NAIL STA. 24E+02.51, 72.83' RT
BM 13	1277.99	HYD NW COR MAPLE & 2ND
BM 21	1285.57	HYD NE COR CENTRAL & 2ND

NO.	STATION	LOCATION	TYPE	DIS. EL.	T.S. EL.	RIM EL.	DEPTH	DISCHARGE PIPE			INL. PROT.	REMARKS	
								SIZE	LENGTH	SLOPE%			
1	20E+65	CL	SAN MH 1 - JM	1269.29	1279.95	1281.16	10.7'	8" PVC	228 LF	0.64%	1267.85	TYPE C	CONNECT TO EXISTING 8" PVC
2	21E+65.5	21.5' RT	CB 2 - E	1272.49	1278.12	1278.91	7.1'	21" PVC		0.28%		TYPE C	CONNECT TO EXISTING 21" PVC (INC.)
3	21E+65.5	21.5' LT	CB 2 - E	1272.68	1278.32	1279.12	7.1'	21" RCP	41 LF	0.46%	1272.49	TYPE C	
4	21E+48	30' LT	STORM LATERAL					6" PVC	20 LF	1.00%	1273.93		CONNECT TO EXISTING MANHOLE (INC.)
5	21E+65	38' LT	STORM SEWER	1272.74				21" RCP	13 LF	0.46%	1272.68	TYPE B	CONNECT TO EXISTING 12" RCP (INC.)
6	22E+48	21.5' RT	CB 2 - H	1272.60	1277.10	1277.89	6.0'	12" RCP	45 LF	2.45%	1271.50	TYPE C	CONNECT TO EXISTING 12" RCP (INC.)
7	22E+48	35' RT	STORM LATERAL	1272.90				8" PVC	13 LF	1.00%	1272.77		CAP AND MARK END (INCIDENTAL)
8	22E+99.75	21.3' RT	RECONST. CB - J		1276.44	1277.36							6" PRE-CAST FLAT TOP REQUIRED
9	22E+99.75	10' RT	ADJUST MH - J		1276.41	1277.06							INSTALL 15" PVC CAP ON W PIPE.
10	22E+99.75	12.5' LT	CB 2 - H	1271.49	1276.08	1276.87	6.1'	12" RCP				TYPE C	CONNECT TO EXISTING 12" RCP (INC.)

NOTE: CONTRACTOR SHALL INSTALL ALL CURB BOXES IN PROPOSED COLORED CONCRETE. CONTRACTOR SHALL FIELD VERIFY WITH ENGINEER TO ENSURE PROPER INSTALLATION LOCATION.

NET LENGTH STA. 19E+75.71 TO 23E+44.39 = 368.68 LF

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	DECORATIVE STREET LIGHT		CONTROL CABINET
	PULL BOX, 24" X 36"		CIRCUIT NUMBER (LIGHTS)
	PROPOSED LIGHTING CONDUIT, AS NOTED		POLE NUMBER
	EXISTING UG ELECTRIC / CONDUIT		CIRCUIT NUMBER (FESTOON OUTLET)
	LUMINATED BOLLARD		LOCATION
	POWER PEDESTAL		

X-X-XXX-(XX)
STA XX+XX.XX
XX.XX, RT

NOTES:
EXISTING CONTROL CABINET LOCATED AT THE OMAHA PARKING LOT.
(ON MAPLE BETWEEN 3RD & 4TH ST).

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PROJECT NUMBER
312219, 312220, 352221, 316774

SHEET NO.
77

RADIUS POINTS (TO FACE OF CURB)			
+	RADIUS	CHAIN	OFFSET
N	20'	E	19E+97.87 33.00' LT
O	30'	E	20E+07.78 37.00' RT
P	20'	E	20E+13.75 27.00' RT
Q	20'	E	20E+44.97 2.00' RT
R	20'	E	21E+03.95 33.00' LT
S	20'	E	21E+29.23 2.00' LT
T	20'	E	22E+05.95 2.00' LT
U	20'	E	22E+31.23 33.00' LT
V	26.5'	E	22E+88.23 4.50' LT
W	20'	E	23E+22.43 27.00' RT
X	20'	E	23E+22.46 33.00' LT
Y	3'	E	22E+07.42 30.50' LT

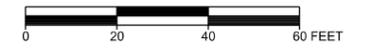
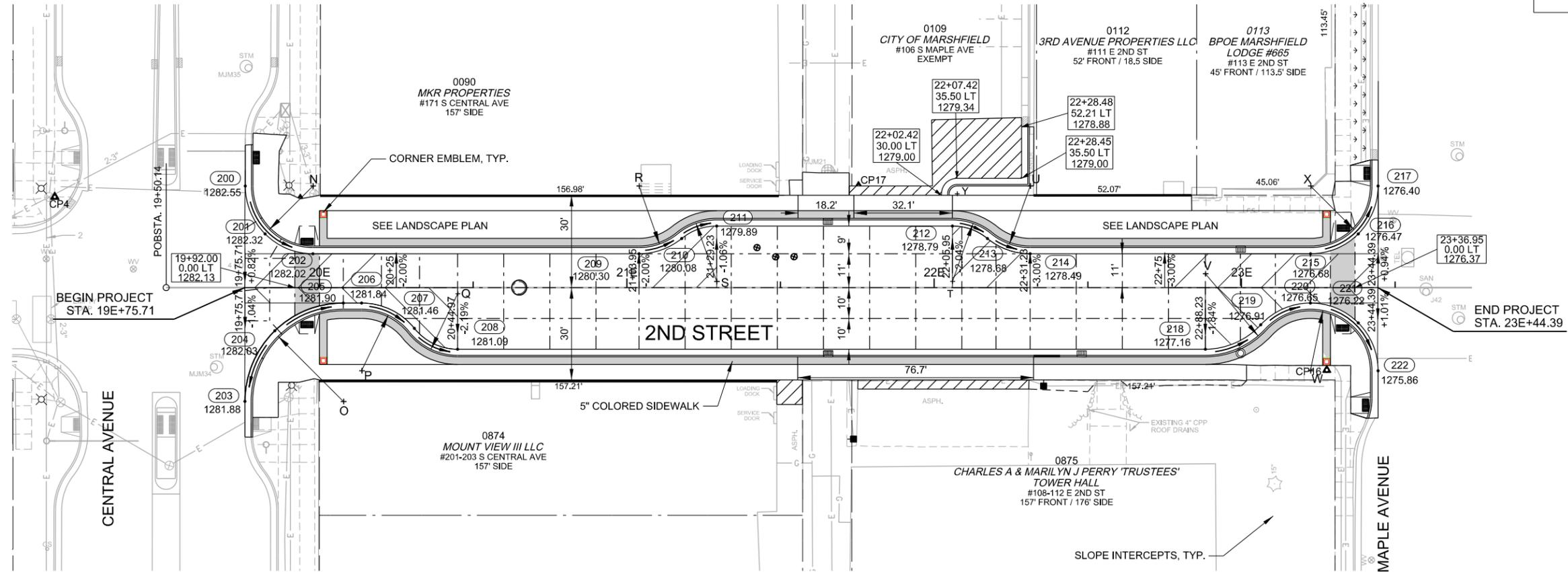
POINT	DESCRIPTION	STATION	OFFSET	RADIUS	ELEVATION
200	EOP PC	19E+75.87	33.01' LT	22'	1282.55
201	EOP MID PT.	19E+82.31	17.45' LT	22'	1282.32
202	EOP PT	19E+97.87	11.00' LT	22'	1282.02
203	EOP PC	19E+75.78	36.99' RT	32'	1281.88
204	EOP H.P.	19E+85.51	14.02' RT	32'	1282.03
205	EOP PT	20E+07.78	5.00' RT	32'	1281.90
206	EOP PC	20E+13.75	5.00' RT	22'	1281.84
207	EOP PT/PC	20E+30.92	13.25' RT	18'/22'	1281.46
208	EOP PT	20E+44.97	20.00' RT	18'	1281.09
209	EOP PC	21E+03.95	11.00' LT	22'	1280.30
210	EOP PT/PC	21E+17.86	15.95' LT	18'/22'	1280.08
211	EOP PT	21E+29.23	20.00' LT	18'	1279.89
212	EOP PC	22E+05.95	20.00' LT	18'	1278.79
213	EOP PT/PC	22E+17.33	15.95' LT	18' / 22'	1278.68
214	EOP PT	22E+31.23	11.00' LT	22'	1278.49
215	EOP PC	23E+22.46	11.00' LT	22'	1276.68
216	EOP MID PT.	23E+38.01	17.44' LT	22'	1276.47
217	EOP PT	23E+44.46	32.99' LT	22'	1276.40
218	EOP PC	22E+88.23	20.00' RT	24.5'	1277.16
219	EOP PT/PC	23E+06.25	12.10' RT	22'/24.5'	1276.91
220	EOP PT/PC	23E+22.43	5.00' RT	22'	1276.65
221	EOP MID PT.	23E+37.99	11.45' RT	22'	1276.22
222	EOP PT	23E+44.43	27.01' RT	22'	1275.86

CP 4 1283.40 PK NAIL STA. 19E+50.14, 29.45' IT
 CP 17 1279.47 MAG NAIL STA. 21E+75.41, 32.91' LT
 CP 18 1282.43 MAG NAIL STA. 19E+93.80, 28.82' LT
 CP 27 1275.09 MAG NAIL STA. 24E+02.51, 72.83' RT
 BM 13 1277.99 HYD NW COR MAPLE & 2ND
 BM 21 1285.57 HYD NE COR CENTRAL & 2ND

LEGEND

COLORED CONCRETE

SEAL EXPANSION JOINT



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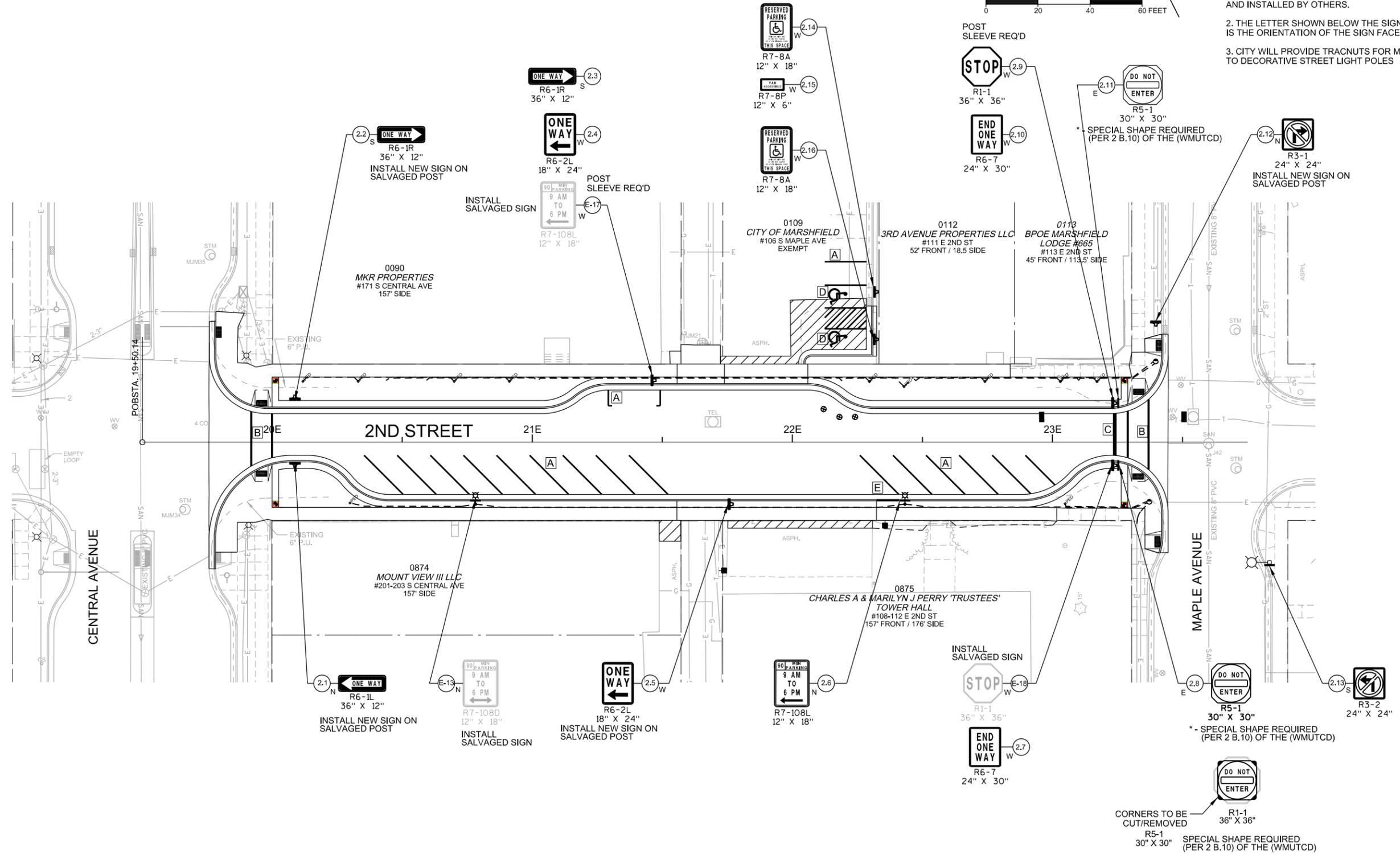
PAVEMENT MARKING LEGEND	
A	PAVEMENT MARKING EPOXY 4-INCH, WHITE
B	PAVEMENT MARKING EPOXY 6-INCH, WHITE, CROSSWALK
C	PAVEMENT MARKING EPOXY 12-INCH, WHITE, STOP LINE
D	PAVEMENT MARKING EPOXY WHITE, SYMBOLS HANDICAP
E	PAVEMENT MARKING EPOXY YELLOW, CURB HEAD

PROJECT NUMBER	SHEET NO.
312219, 312220, 352221, 316774	78

NOTES

1. STREET NAME SIGNS SHALL BE PROVIDED AND INSTALLED BY OTHERS.
2. THE LETTER SHOWN BELOW THE SIGN ID NUMBER IS THE ORIENTATION OF THE SIGN FACE.
3. CITY WILL PROVIDE TRACNUTS FOR MOUNTING SIGNS TO DECORATIVE STREET LIGHT POLES

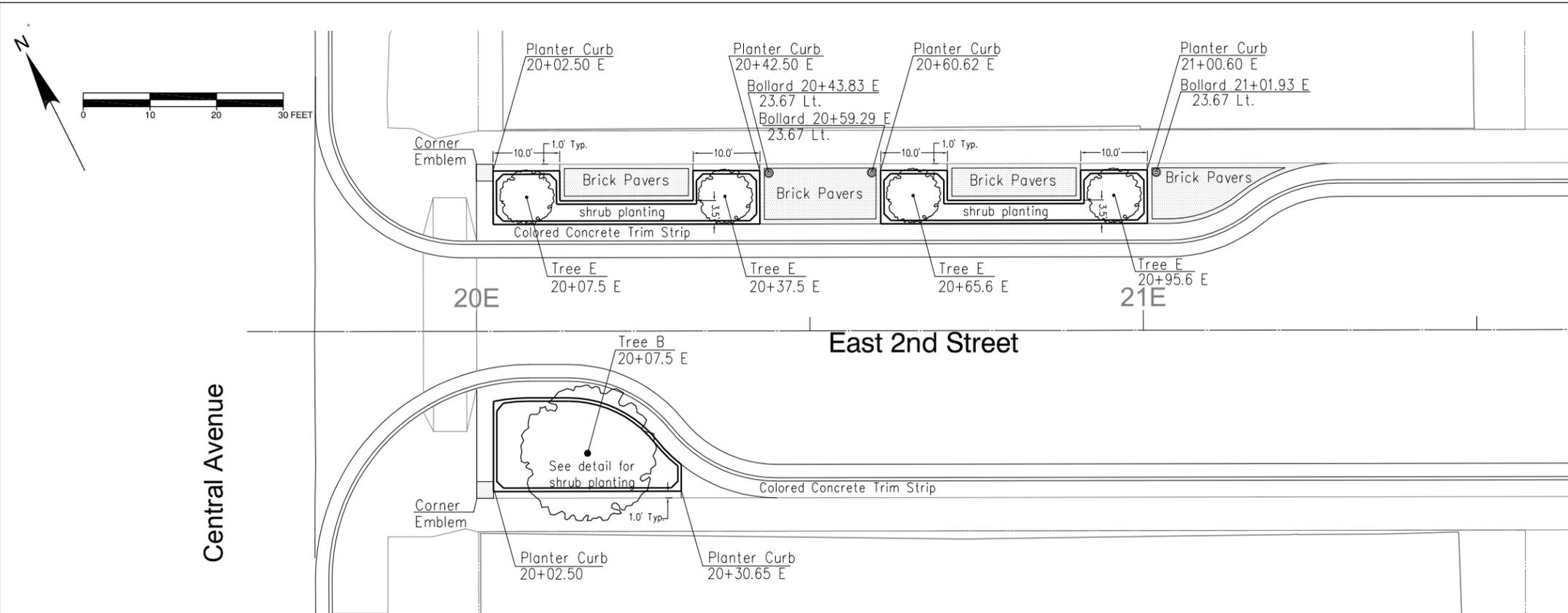
☛ SIGN ON STEEL 'U' CHANNEL POST



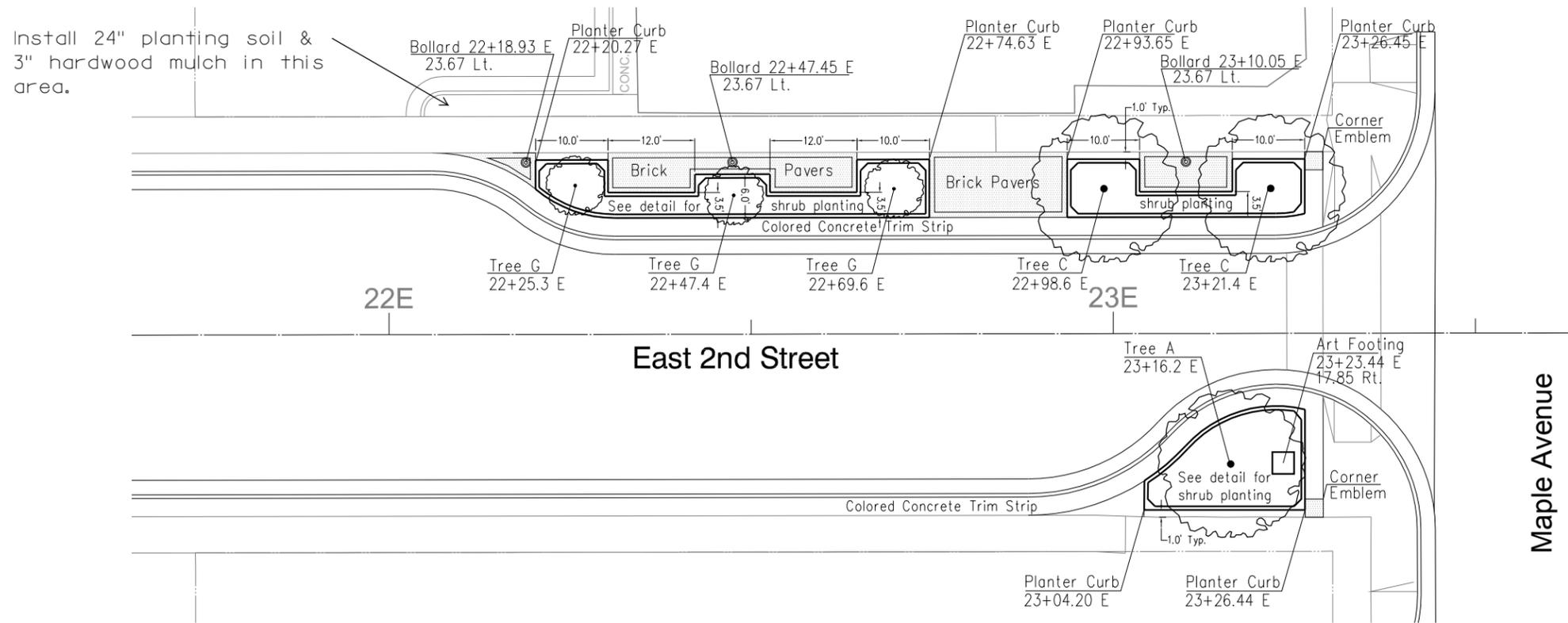
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TREE PLANTING SCHEDULE
Quantities shown are for this sheet only

key	common name/botanical name	size	no.	root
A	Red Oak <i>Quercus rubra</i>	4"	1	b & b
B	'Autumn Gold' Ginkgo <i>Ginkgo biloba 'Autumn Gold'</i>	4"	1	b & b
C	'Skyline' Honeylocust <i>Gleditsia triacanthos 'Skyline'</i>	5"	2	b & b
D	Swamp White Oak <i>Quercus bicolor</i>	5"	0	b & b
E	Prairiefire Crabapple <i>Malus 'Prairiefire'</i>	2.5"	4	b & b
F	Ivory Silk Japanese Tree Lilac <i>Syringa reticulata 'Ivory Silk'</i>	2.5"	0	b & b
G	Autumn Brilliance Serviceberry <i>Amelanchier grand 'Autumn Brilliance'</i>	8'	3	b & b multi stem
H	'Skyrocket' Juniper <i>Juniperus scopulorum 'Skyrocket'</i>	36"	0	b & b

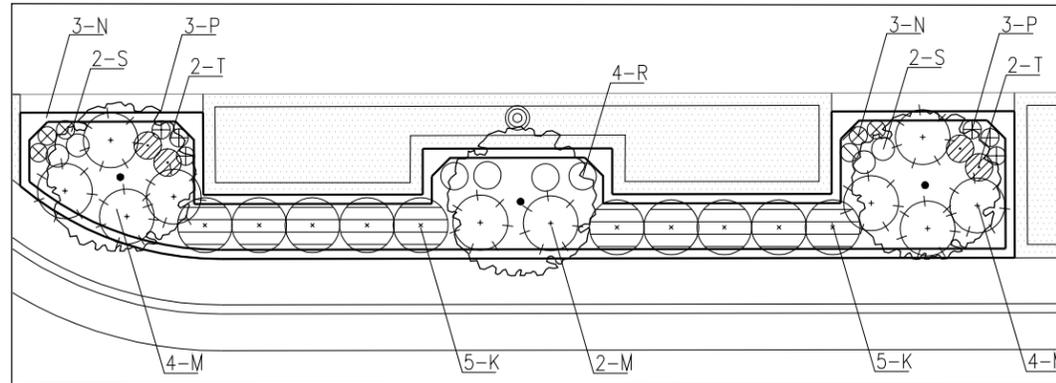
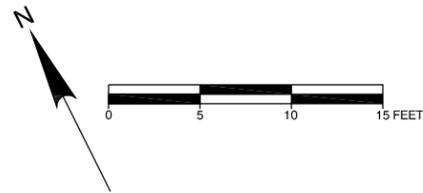


STATION 20+00 E TO STATION 21+65 E

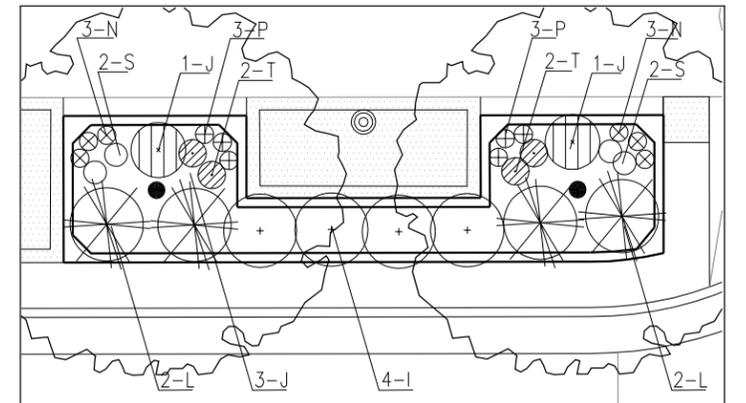


STATION 21+65 E TO STATION 23+30 E

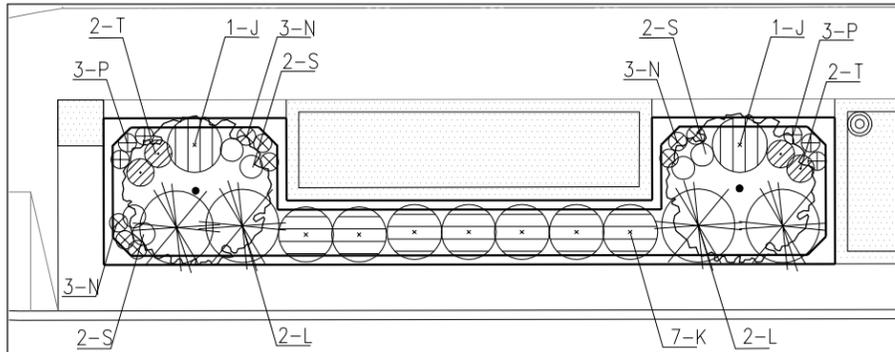




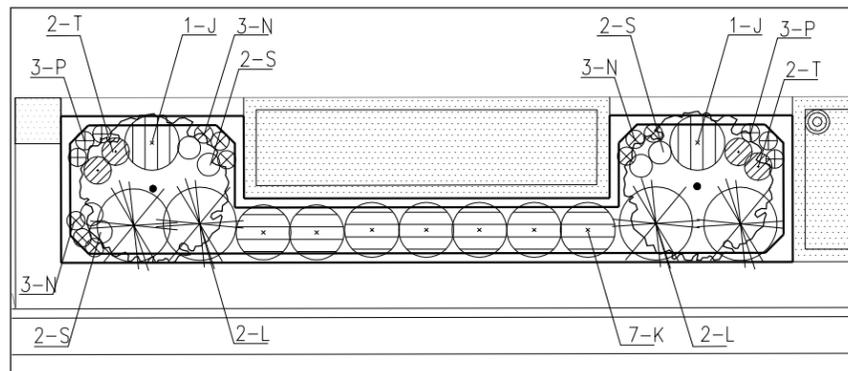
PLANTING DETAIL - STA 22+20 to 22+74 E



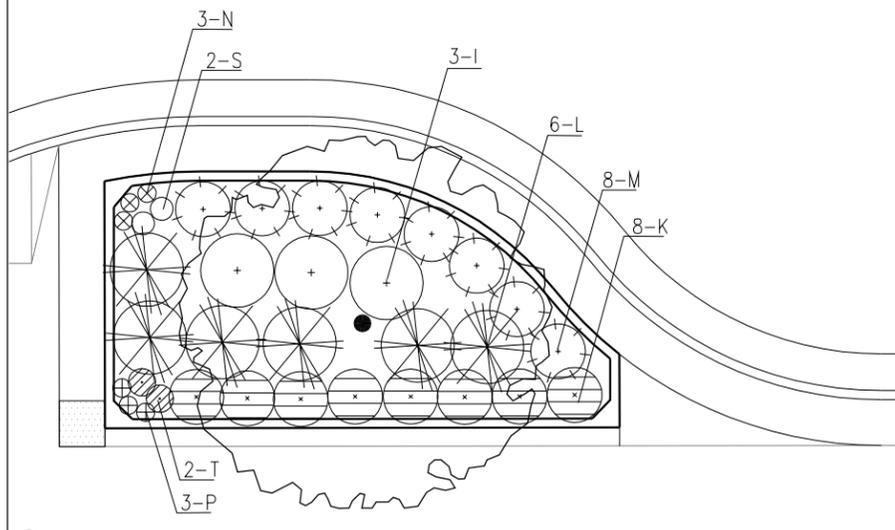
PLANTING DETAIL - STA 22+90 to 23+30 E



PLANTING DETAIL - STA 20+00 to 20+43 E



20+00 E



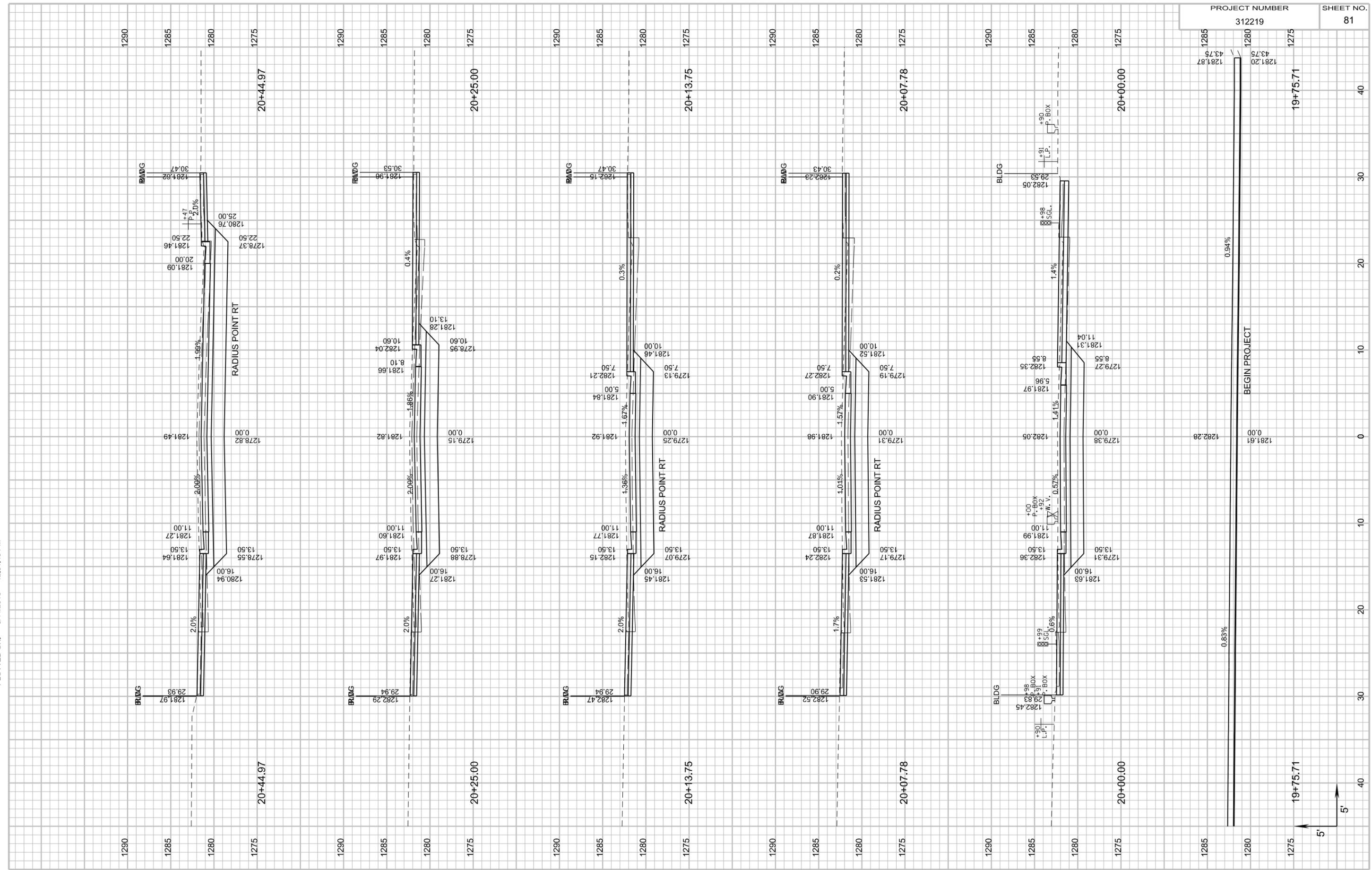
PLANTING DETAIL - STA 20+00 to 20+46 E

SHRUB & PERENNIAL PLANTING SCHEDULE

Quantities shown are for this sheet only

key	common name/botanical name	size	no.	root
I	Black Chokeberry <i>Aronia melanocarpa</i> var. <i>elata</i>	#5	9	container
J	Neon Flash Spirea <i>Spiraea japonica</i> 'Neon Flash'	#3	12	container
K	Little Devil Ninebark <i>Physocarpus opulifolius</i> 'Little Devil'	#5	32	container
L	Seagreen Juniper <i>Juniperus chinensis</i> 'Seagreen'	#5	21	container
M	Broadmoor Juniper <i>Juniperus sabina</i> 'Broadmoor'	#5	25	container
N	'Stella D' Oro Daylily <i>Hemerocallis</i> 'Stella de Oro'	#1	36	container
P	'Pardon Me' Daylily <i>Hemerocallis</i> 'Pardon Me'	#1	30	container
R	'Red Volunteer' Daylily <i>Hemerocallis</i> 'Red Volunteer'	#1	4	container
S	'Goldsturm' Black Eyed Susan <i>Rudbeckia fulgida</i> 'Goldstrum'	#1	22	container
T	'Autumn Joy' Sedum <i>Sedum telephium</i> 'Autumn Joy'	#1	20	container





PROJECT NUMBER 312219
SHEET NO. 81

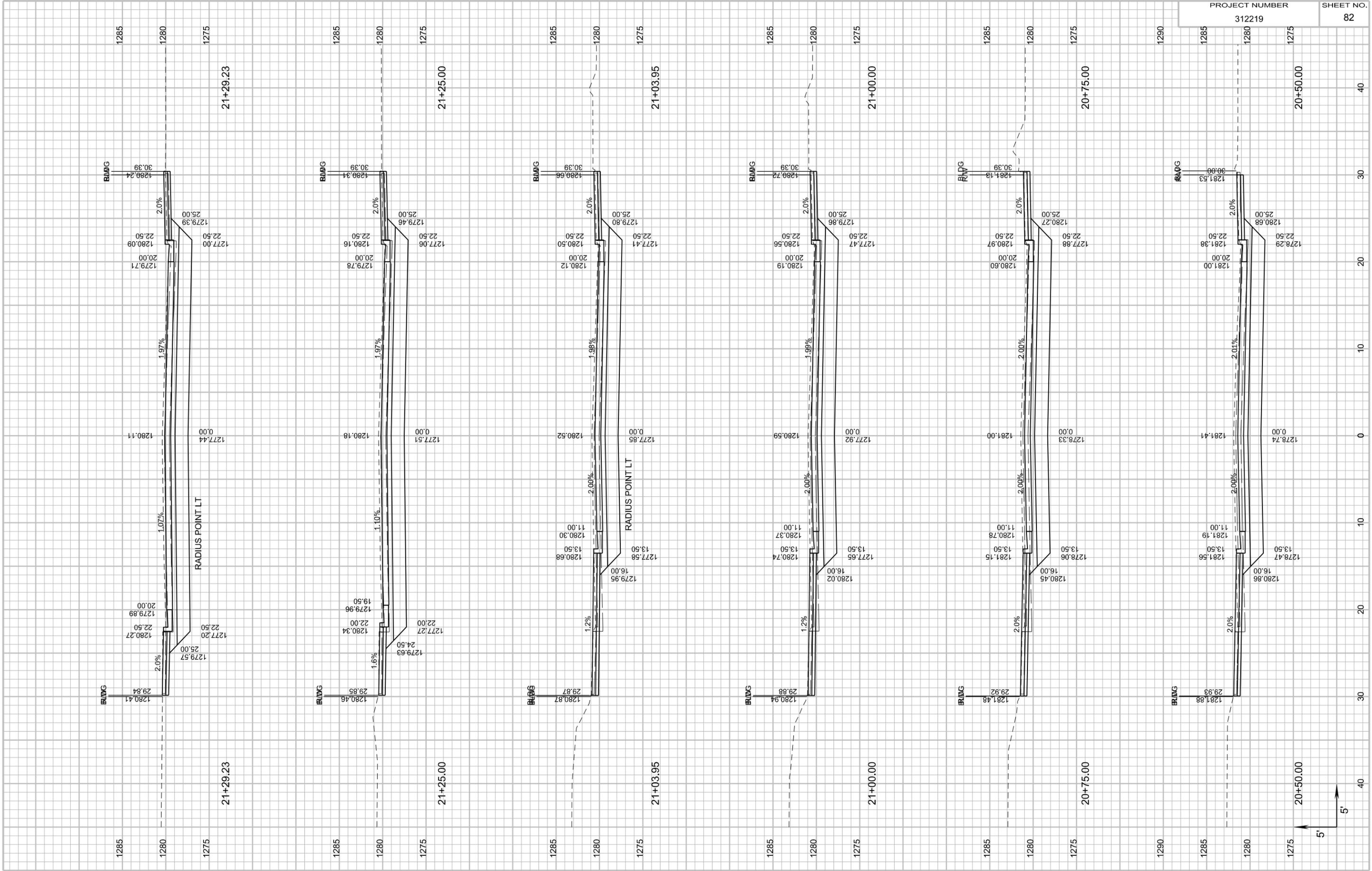
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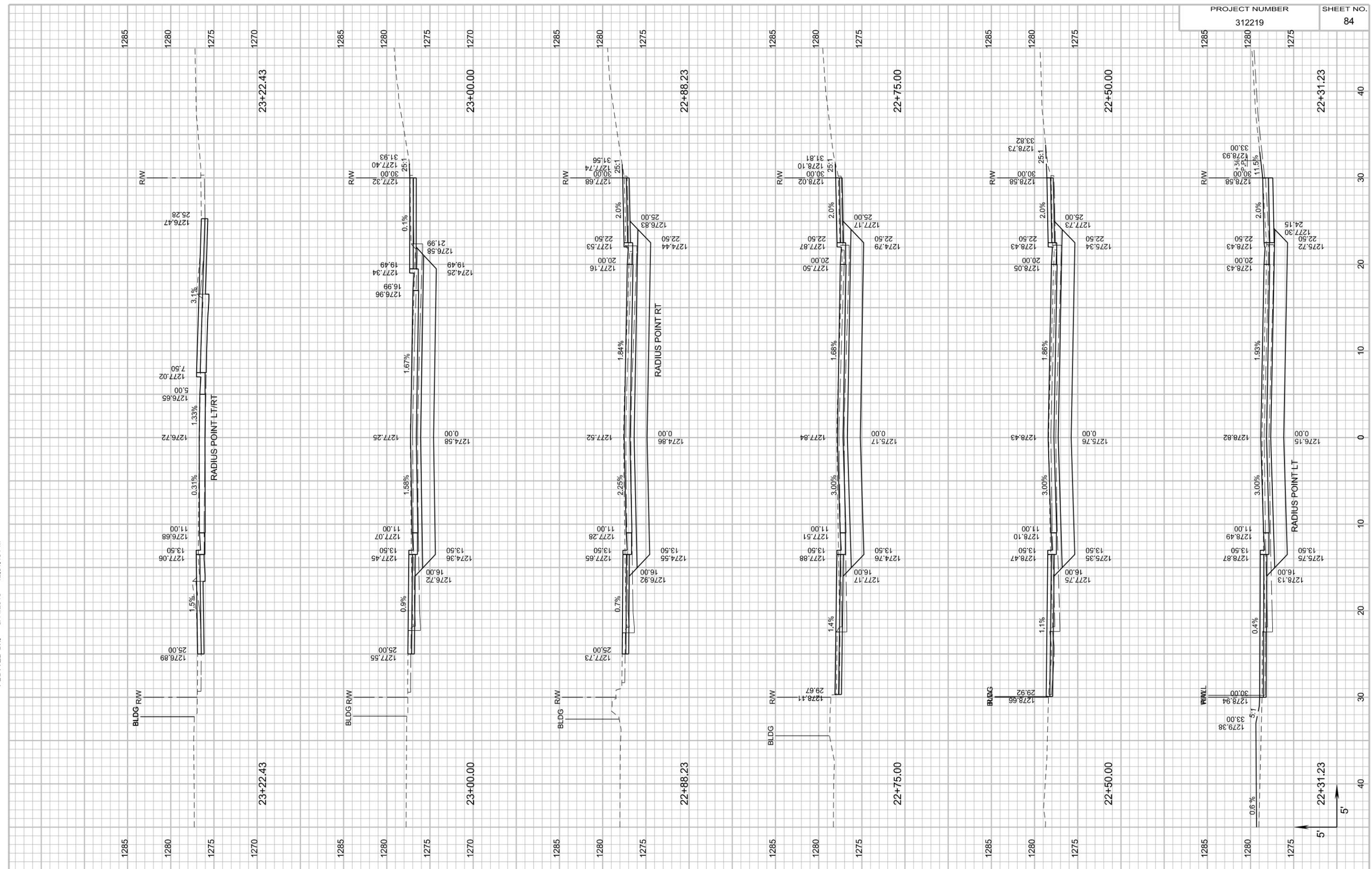
3601-XS1

EAST 2ND STREET STA. 19+75.71 TO STA. 20+44.97

PROJECT NUMBER	312219	SHEET NO.	82
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PROJECT NUMBER	312219	SHEET NO.	84
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3601-XS4

EAST 2ND STREET STA. 22+31.23 TO STA. 23+22.43

