City of Hart, Michigan
CITY COUNCIL AGENDA
August 13, 2024, 7:30 PM
407 State St. – Council Chamber
NOTICE OF PUBLIC MEETING
REGULAR COUNCIL MEETING

1. Call to Order
2. Roll Call – Burillo, Cunningham, Evans, Hodges, Klotz, Trygstad, Platt
3. Pledge of Allegiance
4. Approval of Agenda
5. Public Comments – **Public comment on any matter other than a scheduled public hearing. We ask that you please limit your comments to 3 minutes.**
    a. Correspondence, Events, Presentations
6. Consent Agenda:
    a. Approval of Minutes from July 23, 2024
    b. Bills, Claims, Payroll
    c. Reports of Boards, Commissions, and Committees
    d. Department Reports – Police/BioPure/Public Works/Energy/♥C&E Dvlp./Parks & Rec
7. Action Items
    a. Resolution 2024-22 Accept Bids and Award West Main Street Resurfacing Project
8. Discussion Items
    a. Safe Routes to School – Status update and South Plum alignment
    b. Veteran's Park Bid Opening
9. City Manager Report
10. Communications from the Mayor and Council (Including board and committee updates.)
11. Adjournment –

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With advance notice of seven calendar days, the City will provide interpreter services at all public meetings, including language translation and signage for the hearing impaired. Call 231-873-2488. La Ciudad proporcionará servicio de intérprete para esta reunión pública si se pide con siete días de anticipación, lo cual incluye la traducción de idioma y letreros para los con una discapacidad auditiva. Llame al 231-873-2488.

CITY OF HART
407 S. STATE ST.
HART, MI 49420
REGULAR MEETING OF CITY COUNCIL - COUNCIL PROCEEDINGS
July 23rd, 2024
MINUTES – Draft

PRESENT: Mayor Vicki Platt, Councilors Jim Cunningham, Dean Hodges and Amanda Klotz
ABSENT: Catalina Burillo, Jim Evans, and Kris Trygstad
OTHERS PRESENT: City Manager – Rob Splane, BioPure Superintendent – Paul Cutter, DPW Superintendent – Brad Whitney, Eric and Deana Fox and Cristina Juska

Mayor Platt called the meeting to order; following the roll call, then led the Council in the pledge of allegiance.

APPROVAL OF AGENDA:

- A. Klotz motioned to approve Amended agenda and was supported by J. Cunningham
  - Ayes: 4 Nays: 0 Absent: 3

PUBLIC COMMENTS:

- Eric Fox, Running for Probate Court Judge - Po Box 710, I've been at 111 state street since 2012, before that I was on the corner of state street and Polk Rd. I wanted to start by saying there is an election coming up and I'm on the ballot and would appreciate your support. And also, I want to thank the City for everything that they have done, I've been involved in 3 events the City has put on since I was here last, the historic tour that Paul Cutter helped put together, The Asparagus Festival despite the rain ended splendid, and Hart Sparks which is a great event. The City looks great, I appreciate everything as a property/Business owner. If you have any questions, I'd love to answer than for you.

CORRESPONDENCE, EVENTS, PRESENTATIONS:

- NONE

CONSENT AGENDA:

- Approval of minutes from July 9th, 2024
- Bills, Claims, Payroll
- Reports of Boards, Commissions, and Committees
- Department Reports – Police/BioPure/Public Works/Energy/C&E Dvlp

- A. Klotz motioned to approve Consent Agenda and supported by J. Cunningham
  - Ayes: 4 Nays: 0 Absent: 3

ACTION ITEMS:

- Resolution 2024-19 Appointed Officials Wage Rate

  WHEREAS, the City recognizes that highly trained, dedicated staff is necessary to conduct City operations with minimal staff; and
  WHEREAS, per the City Charter, City Council sets appointed officials pay rates; and
  WHEREAS, City policy has historically awarded annual union contract raises to non-union employees as to not penalize them due to their lack of collective bargaining; and
  WHEREAS, to secure the benefits of efficient self-government and to promote and protect our common interests and welfare, the City Council hereby declares;
  NOW THEREFORE BE IT RESOLVED THAT THE CITY COUNCIL:

  Authorizes and approves the following appointed officials pay rates to be effective as of July 1, 2024:

  City Clerk/Treasurer: $66,033 ($62,296 current – last increase July 2023)
  City Of Hart Police Chief: $81,513 ($78,378 current – last increase July 2023)
  City of Hart City Manager: $94,051 ($90,434 current – last increase July 2022)

Further authorizes and approves a one-time 6 month retroactive payment using the July 2024 [ay rates due to increased workload due to absent central office staff member for the City Clerk/Treasurer ($1,868.50) and Deputy City Clerk/Treasurer ($930.44).

- A. Klotz motioned to Amend Resolution 2024-19 and give all officials a 4% raise across the board and approve the onetime bonus for office staff, and supported by D. Hodges
  - Ayes: 4 Nays: 0 Absent: 3

- Resolution 2024-21 Authorize Construction of Parking Lot

  WHEREAS, the City of Hart established a Tax Increment Finance Authority (TIFA) in 1983 to help catalyze public and private investment in a defines business district; and

  WHEREAS, in 2021, the Hart TIFA board and City Council worked together to restate the TIFA plan; and

  WHEREAS, one of the established goals included in the 2021 document was to repurpose the site of 211 E Main Street into a planned parking lot; and

  WHEREAS, TIFA has budgeted for the project, worked with City engineers to develop proper design work, and sought competitive bids for the parking lot construction work; and

  WHEREAS, to secure the benefits of efficient self-government and to promote and protect our common interests and welfare, the City Council hereby declares;

  NOW THEREFORE BE IT RESOLVED THAT THE CITY COUNCIL:

  Authorizes and approves the construction of Parking Lot 0 on City property parcel 020-209-005-00 (211 E Main Street) using TIFA funds.

  - A. Klotz motioned to approve Resolution 2024-21 and supported by J. Cunningham
    - Ayes: 4 Nays: 0 Absent: 3

DISCUSSION ITEMS:

- NONE

CITY MANAGER'S REPORT:

Updates:

- Welcome Jim Cunningham!
- Meetings are being scheduled with water quality experts and local stakeholders to assist the City with reviewing and revising the EGLE imposed administrative consent order which enforces water quality standards of the Pentwater River which is classified as a cold-water trout stream.
- Hart Library board is working with the City to draft a service agreement to define ongoing expectations and if financial compensation is appropriate to offset the use of enterprise funds.
- The progress meeting was held at Hart BioPure to discuss current status and plan for the next phase of construction. Coming weeks/months will be tricky in respect to plant operations while accommodating project management.
- The new Parks and Recreation Department head will be meeting with staff and volunteers at the Hart Historic District next week to learn more about the facilities and discuss potential support that the department could offer to help with future operations.
- Audit prep work to begin next week with Brickley Delong staff on site.
- West Main Street bid opening is August 1st
- Hart Energy high-line project bid opening August 6th
- Veteran's Park bid opening August 7th

Legacy Topics:

- Safe Routes to School trail project – **Approved for bid letting in October' 24!**

Upcoming Topics:

- Adoption of 5-year Park and Rec Master Plan (Currently back and forth negotiation with MDOT)
- Council review of rental inspection policies, procedures, and implementation. Chief Salazar is delayed due to 2 employee resignations and 2 employees parental leave)

COMMUNICATIONS FROM THE MAYOR AND COUNCIL:

- Mayor Platt will get with J. Cunningham regarding boards and committees he can join.

ADJOURN:

- There being no further business to come before the Council, the meeting adjourned upon a motion by A. Klotz and supported by D. Hodges. The next regularly scheduled meeting will be on Aug 13th, 2024, at 7:30 pm.

Respectfully Submitted

Karla Swihart

Karla Swihart, City Clerk

Payables Date 08.14.2024	Description	Total	General +	DPW	Energy	BPTF	Water
A & L Great Lakes Lab Inc	Soil Testing	$ 102.00				$ 102.00	
AIS	Supplies - Conduit	$ 5,504.00			$ 5,504.00		
Alvesteffer, Amelia & Shawn	Utility Deposit Refund	$ 180.57			$ 180.57		
Andritsis, Lisa	Utility Deposit Refund	$ 91.85			$ 91.85		
APX, INC	Mirecs	$ 29.46			$ 29.46		
Cintas	Bathroom Supplies - JGP 7/23	$ 174.31	$ 174.31				
Cintas	Bathroom Supplies - JGP 7/30	$ 76.51	$ 76.51				
City of Hart	Utility Bills	$ 52,808.25	$ 5,129.90	$ 1,107.41	$ 2,464.16	$ 40,694.58	$ 3,412.20
Consumers Energy	Utilities	$ 187.87			$ 187.87		
Dacott	Purchase Power Report	$ 650.00			$ 650.00		
Dacott	Purchase Power Report - Re-Issued Payment	$ 650.00			$ 650.00		
Dave's Party Store	Fuel - JGP	$ 245.51	$ 245.51				
Dave's Party Store	Fuel - DPW	$ 933.01		$ 933.01			
DTE Energy	Natural Gas	$ 707.13	$ 130.91	$ 58.10	$ 250.98	$ 267.14	
Earle, Katherine	Utility Deposit Refund	$ 3.26			$ 3.26		
Frontier	Phone Service - Diesel Plant	$ 125.92			$ 125.92		
Gillison's Variety Fabrication	Parts/Supplies	$ 125.91				$ 125.91	
Gracon	Data Protect Cloud-12 Mnth Sub.	$ 741.28	$ 247.10	$ 123.55	$ 123.55	$ 123.54	$ 123.54
Great Lakes Cleaning Services	City Hall/Comm. Center Cleaning	$ 1,350.00	$ 1,350.00				
Hale, Michael	Utility Deposit Refund	$ 200.00			$ 200.00		
Hallack Contracting	Stone - JGP	$ 406.18	$ 406.18				
Huck, Caitlin	Utility Deposit Refund	$ 121.92			$ 121.92		
Klotz Auto Parts	Auto Parts/Supplies	$ 453.22	$ 68.31	$ 336.86	$ 22.73	$ 25.32	
Larson's Ace Hardware	Parts/Supplies	$ 1,837.36	$ 783.38	$ 319.86	$ 178.20	$ 555.92	
Lawson-Fisher Associates	2024 Licensing Requirements - Dam	$ 3,596.70			$ 3,596.70		
LEAF	Copier Lease Fee - Police Dept	$ 49.61	$ 49.61				
Lighthouse Car Care	Tire Repair	$ 15.00				$ 15.00	
Linde Gas & Equipment	Cylinder Rental - Energy	$ 117.02			$ 117.02		
Michigan Freeze Pack	Energy Optimization Incentive	$ 24,622.34			$ 24,622.34		
Mika Meyers	Legal Services -Charter Revision	$ 80.00	$ 80.00				
Mika Meyers	Legal Services - EDA Grant	$ 120.00	$ 120.00				
Mika Meyers	Legal Services - Creeks	$ 1,268.50	$ 1,268.50				
Mika Meyers	Legal Services - Prosecution Matters	$ 66.00	$ 66.00				
Mika Meyers	Legal Services - Prosecution Matters	$ 868.00	$ 868.00				
Mike's Auto Body	Vehicle Repair - JGP - Chey Pickup	$ 254.80	$ 254.80				
Mineral Masters	Chemicals	$ 3,600.50				$ 3,600.50	
Model Coverall Service	Uniforms/Cleaning - July Stmnt	$ 205.51			$ 83.52	$ 121.99	
MPPA	Purcahsed Power	$ 42,013.88			$ 42,013.88		
MPPA	Purchased Power	$ 42,443.02			$ 42,443.02		
Napa Auto Parts	Auto Parts/Supplies	$ 8.11				$ 8.11	
Nutrien Ag Solutions	Chemicals	$ 272.37				$ 272.37	
Nutrien Ag Solutions	Chemicals	$ 402.98				$ 402.98	
NYE Uniform Co.	Uniforms - Police Dept	$ 42.23	$ 42.23				
Oceana County Administrator	Assessing Services	$ 9,350.00	$ 9,350.00				
PM Collision	Vehicle Repair - Police Explorer	$ 1,056.19	$ 1,056.19				
Power Line Supply	Parts/Supplies	$ 3,597.25			$ 3,597.25		
Power Line Supply	Parts/Supplies	$ 2,737.33			$ 2,737.33		
Power Line Supply	Parts/Supplies	$ 2,239.33			$ 2,239.33		
Power Line Supply	Parts/Supplies	$ 87.58			$ 87.58		
Power Line Supply	Parts/Supplies	$ 225.00			$ 225.00		
Power Line Supply	Parts/Supplies	$ 4,268.72			$ 4,268.72		
Power Line Supply	Parts/Supplies	$ 126.24			$ 126.24		
Power Line Supply	Parts/Supplies	$ 47,469.38			$ 47,469.38		
Power Line Supply	Parts/Supplies	$ 394.25			$ 394.25		
Power Line Supply	Parts/Supplies	$ 2,456.73			$ 2,456.73		
Power Line Supply	Parts/Supplies	$ 32.90			$ 32.90		
Power Line Supply	Parts/Supplies	$ 1,129.95			$ 1,129.95		
Power Line Supply	Parts/Supplies	$ 458.54			$ 458.54		
Power Line Supply	Parts/Supplies	$ 39.00			$ 39.00		
Profit Makers	Campstore Merchandise - JGP	$ 85.00	$ 85.00				
Republic Services	JGP - Garbage Services Past Due/Current	$ 1,190.64	$ 1,190.64				
Republic Services	Garbage Services - DPW	$ 90.95		$ 90.95			
Republic Services	Garbage Overage Fees - City Hall/Library	$ 175.95		$ 175.95			
Republic Services	Solid Waste Contract	$ 18,026.99		$ 18,026.99			
Republic Services	Garbage Services - Washington Parking Lot	$ 88.00		$ 88.00			
Republic Services	Garbage Services - The Starting Block	$ 197.17			$ 197.17		
Ricoh	Copier Overage Fees	$ 118.26	$ 118.26				
Rivers Ace Hardware	Supplies - JGP	$ 149.97	$ 149.97				
Schweitzer Engineering Labs	Single Phase Voltage Control/Interface Kit	$ 4,196.28			$ 4,196.28		
SD Myers LLC	CriticalPac/Inspection/Sampling	$ 6,976.00			$ 6,976.00		
Steve's Auto & Truck	Vehicle Repair - Impala - Police Dept	$ 291.86	$ 291.86				
Steve's Auto & Truck	Oil Change - Police Dept	$ 63.94	$ 63.94				
SyncWave	Internet	$ 468.14	$ 107.66	$ 84.27	$ 84.27	$ 191.94	
Team Life	AED/AED Case and Kit	$ 1,741.00			$ 1,741.00		
Ter Haar, Wendy	JGP/Hart Commons Cleaning - July Stmnt	$ 1,000.00	$ 1,000.00				
Thomasson Company	Poles	$17,003.00			$ 17,003.00		
Trace Analytical Labs	Water Testing/Lab Services	$ 182.20				$ 182.20	
UIS Scada	Trouble Shooting - North & South Wells	$ 1,775.22					$ 1,775.22
VitalShred	Shredding/Recycle Dec 2023-July 2024	$ 509.33	$ 509.33				
Windridge	Parks & Recs Shirts	$ 744.00	$ 744.00				
Windridge	Energy Shirts	$ 396.00			$ 396.00		
	Sub-total	**$ 318,890.38**	**$ 26,028.10**	**$ 21,344.95**	**$ 219,516.87**	**$ 46,689.50**	**$ 5,310.96**
HAND CHECKS/ACH/EFT							
Alerus	City Share 401 Retirement - PR 194	$ -	$ -				
US Postmaster	Postage/Tax Bills						
AFLAC	Insurance Premium	$ -	$ -				
Guardian	Insurance Premium	$	$				
Delta Dental	Insurance Premium	$	$ -				
MWG/Amfirst	Insurance Premium	$ -	$ -				
Blue Cross Blue Shield	Insurance Premium	$ -	$ -				
	TOTAL HAND CHECKS	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	Sub-Total Regular Bills/Hand Checks	***$ 318,890.38***	***$ 26,028.10***	***$ 21,344.95***	***$ 219,516.87***	***$ 46,689.50***	***$ 5,310.96***
Gross Payroll	PR 210	$ 83,642.04					
	Sub-Total	**$ 83,642.04**					
	GRAND TOTAL	***$ 402,532.42***	**$ 26,028.10**	**$ 21,344.95**	**$ 219,516.87**	**$ 46,689.50**	**$ 5,310.96**

Payroll ID: 210

Pay Period End Date: 07/28/2024 Check Post Date: 08/01/2024 Bank ID: GEN

	Pay Code Id	Hours	OT Hours	Cur. Amnt.	YTD Amnt.
**	2X	0.00	0.00	12.18	
**	HOLIDAY	8.00	0.00	196.80	
**	HOURLY	0.00	0.00	242.10	
	15X	0.00	12.50	652.87	32,595.58
	225X	0.00	0.00	0.00	9,114.21
	2X	0.00	4.00	260.32	15,348.82
	BACK PAY	0.00	0.00	0.00	342.35
	COMP	4.00	0.00	245.92	13,331.58
	ETO	172.50	0.00	6,237.62	88,947.23
	ETO BUYOUT	0.00	0.00	0.00	10,869.50
	FAIR - POL	0.00	0.00	0.00	0.00
	HOL	0.00	0.00	0.00	23,281.37
	HOLIDAY	8.00	0.00	250.10	13,429.06
	HOLIDAY POLICE	0.00	0.00	0.00	4,059.38
	HOLIDAY WORKED	0.00	0.00	0.00	0.00
	HOURLY	1,108.40	0.00	36,896.14	441,830.50
	LEAD JOURNEY LW	0.00	0.00	0.00	1,174.64
	LONG	0.00	0.00	0.00	0.00
	OPT OUT	0.00	0.00	0.00	82,913.34
	SALARY	1,073.00	0.00	38,322.84	524,359.61
	STANDBY	9.50	0.00	325.15	6,892.38
	TRAVEL TIME	0.00	0.00	0.00	0.00

Ded/Exp Id	Cur. Amnt.	YTD Amnt.
AF-ACC	146.17	1,599.47
AF-CANCER	76.70	843.70
AF-DENTAL	14.46	159.06
AF-LIFE	32.96	362.56
AF-PSI	55.37	599.71
AF-STD	135.25	1,487.75
ALERUS 401	2,141.11	31,323.17
ALERUS 401 AD	8.00	128.00
ALERUS 457	775.00	12,400.00
ALERUS 457P	1,099.88	19,517.88
ALERUS R 457%	1,323.84	21,881.71
DENTAL_EE	126.12	1,640.83
FITW	7,685.47	125,249.20
GAP_EE	445.24	5,836.31
GUARDIAN_EE	24.85	324.51
LIFE	18.25	146.00
LOAN	363.17	5,578.88
LU465	294.40	2,237.44
MED_EE	1,912.69	25,432.16
MEDICARE_EE	1,172.17	17,857.02
OVER PAY	32.68	228.76
SITW	3,199.76	47,453.31
SOCSEC_EE	5,012.09	76,354.12
UNI45	318.00	2,251.50
UNIFM	4.95	79.20

Gross Pay This Period	Deduction Refund	Ded. This Period	Net Pay This Period	Gross Pay YTD	Dir. Dep.
83,642.04	0.00	26,418.58	57,223.46	1,269,082.98	56,500.55

** = Check Adjustment*

RESOLUTION 2024-22
City Council
City of Hart, Michigan
Oceana County

ACCEPT BIDS AND AWARD CONTRACT FOR THE RESURFACING OF WEST MAIN STREET

WHEREAS, the City of Hart is responsible for the maintenance and repair of city streets; and

WHEREAS, the City of Hart has funding available in Major Streets 202 Fund to cover the cost of resurfacing West Main Street which currently holds a Pavement Surface Evaluation and Rating of PASER designation of "Poor" condition; and

WHEREAS, per city council direction in May of 2024, the project has been budgeted for, engineering specifications have been developed, and public bids have been sought; and

WHEREAS, in order to secure the benefits of efficient self-government and to promote and protect our common interests and welfare, the City Council hereby declares:

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL

Accepts six sealed bids for the resurfacing of West Main Street.

Authorizes and approves the resurfacing of West Main Street from the West Main fill west to the City limit and awards the work to low-bidder Wadel Stabilization $302,059.30.

Directs the City Manager to sign all related documents on behalf of the City of Hart.

Moved by _____, supported by _____, and thereafter adopted by the Hart City Council at a regularly scheduled council meeting held on Tuesday, August 13, 2024.

Ayes: __ Nays: __ Absent: __

Prein&Newhof
Engineers ▪ Surveyors ▪ Environmental ▪ Laboratory

August 7, 2024
2240473

Mr. Rob Splane
City of Hart
407 State Street
Hart, MI 49420

RE: West Main Street Resurfacing

Dear Mr. Splane:

On Thursday, August 1, the City received six bids for the referenced project. The bids ranged from $302,059.30 to $374,357.50. Wadel Stabilization of Hart, MI submitted the lowest bid at $302,059.30 with a proposed fall 2024 completion schedule. A tabulation of the bids is enclosed for reference.

We discussed the project with Wadel. They indicated a good understanding of the project scope. Schedule is not determined at this time. They did not express any concerns with completing the project successfully and on time. Wadel indicates the anticipate needing 2 to 3 weeks to complete the work and intend to start work in early September.

Wadel has successfully completed projects of similar size and scope with Prein&Newhof and the City of Hart in the past.

If you have any questions, please do not hesitate to ask.

Sincerely,

Prein&Newhof

Matthew R. Hulst, P.E.

Enclosures: Bid Tabulation Sheets

Prein&Newhof
Engineers▪Surveyors▪Environmental▪Laboratory

Bid Tabulation Summary

Bid Date:	Bid Time (Local):
1-Aug-24	2:00 PM

Owner:
City of Hart

Project Title:
West Main Street Resurfacing

Project #:
2240473

Number	Contractor Name	Completion Year	Bid Amount
1st	Wadel Stabilization 2500 N Oceana Drive, Hart, MI 49420	2024	$302,059.30 *
2nd	Rieth-Riley Construction 5565 W 1st St, Ludington, MI 49431	2025	$310,032.10 *
3rd	Anlaan Corporation 16750 Lincoln St, Grand Haven, MI 49417	2024	$314,638.00
4th	McCormick Sand, Inc 5430 Russell Rd, Twin Lake, MI 49457	2025	$346,638.00
5th	McCormick Sand, Inc 5430 Russell Rd, Twin Lake, MI 49457	2024	$369,378.00
6th	Hallack Contracting, Inc 4223 W Polk Rd, Hart, MI 49420	2024	$374,357.50

* Denotes correction made by Engineer

3355 Evergreen Dr. NE Grand Rapids, MI 49525 t. 616-364-8491 f. 616-364-6955 www.preinnewhof.com

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

January 6, 2023

Via Email: RSplane@CityofHart.org

Mr. Rob Splane, City Manager
City of Hart
407 State Street
Hart, MI 49420

RE: Plum Street Reconstruction Design Engineering Proposal

Dear Rob:

As requested, we have prepared our proposed Scope of Services and Budget for design engineering for the above referenced project. The scope and budget are based on the project being designed in a plan sheet format that will coordinate with the SRTS Pathway project design currently under way.

We understand that City will be funding the project with City funds.

The City would prefer to bid the project early in 2023 for construction during the 2023 season PRIOR to the SRTS Pathway project commencing.

We understand that City is looking for assistance with the design for the reconstruction of approximately 1,000 feet of Plum Street from Gilmore to West Main. The intent is to complete the reconstruction/realignment prior to the SRTS project and to coordinate both projects to not conflict work efforts and schedules. Some additional topographic survey may be required for the segment to tie the existing SRTS survey data points together and ensure drainage and surface improvements are not conflicting.

Work Plan

Preliminary Design Phase

1. Meet with the City to review project requirements, work scope and overall schedule. Collect available data from the City on utilities, right-of-way, soils, etc.
2. Conduct field data collection work to identify project limits, stations, work items and typical cross sections, as needed.
3. Complete preliminary project plans.
4. Prepare preliminary cost estimate.
5. Submit preliminary plans and estimate to the City for review and comment.

Final Design Phase

1. Complete the final project documents in accordance with City's review comments. The applicable documents shall be prepared in accordance with the MDOT Road Design Manual and LAP Geometric Guidelines, as applicable.
2. Prepare updated estimate of probable construction cost.

2960 Lucerne Dr SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005
www.fveng.com

3. Submit final project plans including specifications, bid items and cost estimate to the City for final approval to initiate the bidding process.

Bidding Phase

1. Place advertisement and bid document on F&V online bid room.
2. Distribute bidding documents to Contractors.
3. Assist during the bidding period by answering questions from Contractors and providing supplemental information, if required.
4. Conduct public bid opening at City Offices.
5. Tabulate and review bids then provide recommendation of award to City.

Professional Fees

We propose to complete design engineering services on the project as outlined above for the following not-to-exceed amounts:

Description	Plum Street Design Fee
Topographic Survey	$ 2,900
Design & Bidding Phase	$ 14,000
Total Design Phase Fees:	**$ 16,900**

Authorization to proceed with these professional services can be given by returning a signed copy of this letter.

Please feel free to contact us with any questions or concerns.

Sincerely,
FLEIS & VANDENBRINK ENGINEERING, INC.





Lawrence B. Hummel, P.E.
Sr. Project Manager

Don DeVries, P.E.
Principal

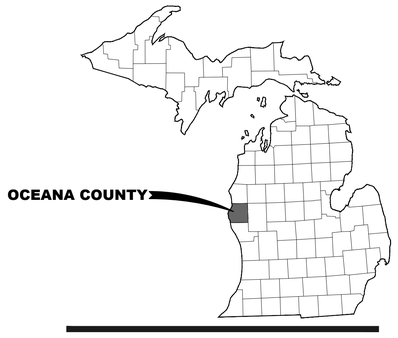
WORK AUTHORIZATION

Fleis & VandenBrink Engineering, Inc. (F&V) is hereby authorized to perform Services as detailed in this proposal dated January 6, 2023, and authorized under the General Consultation Professional Services Agreement with F&V.

_____ _____

Rob Splane, City Manager **Date**

CITY OF HART
IN COOPERATION WITH THE
MICHIGAN DEPARTMENT OF TRANSPORTATION
AND THE
FEDERAL HIGHWAY ADMINISTRATION
SAFE ROUTES TO SCHOOL
JUNE 2024



VICINITY MAP

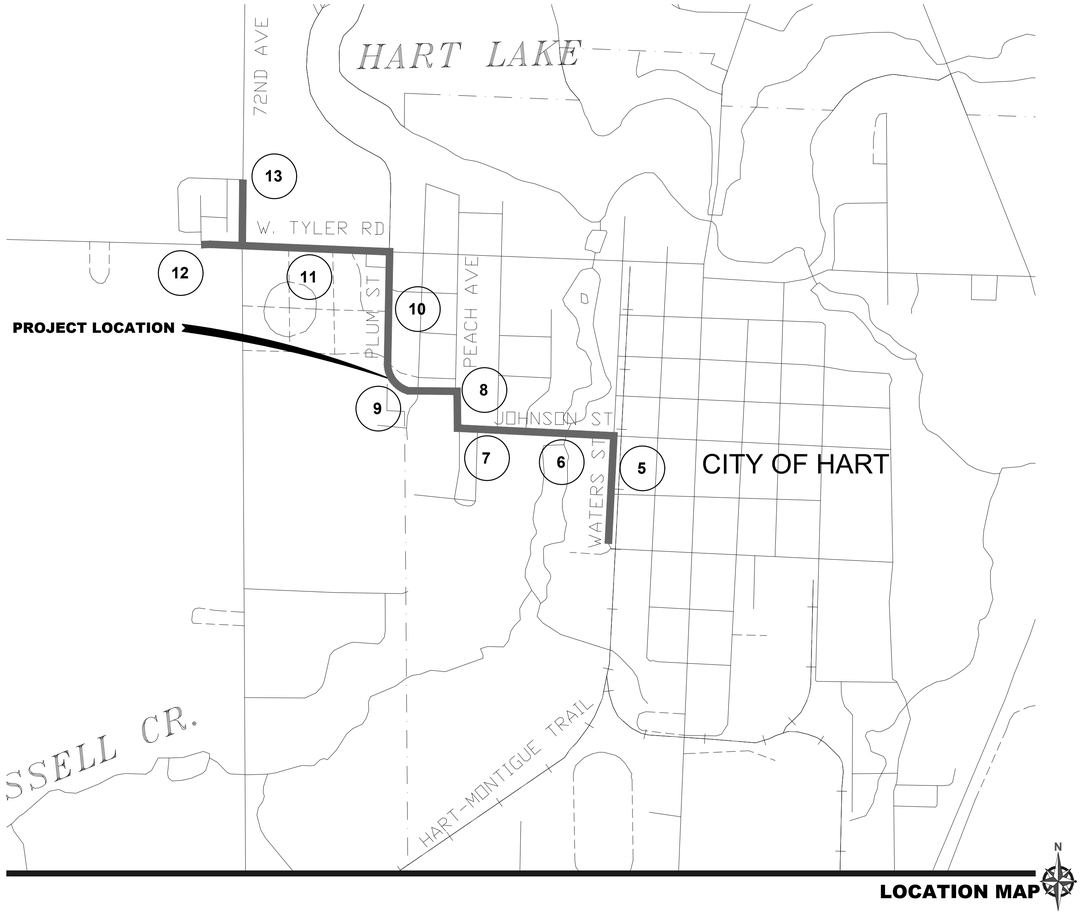
CITY OF HART SRTS TRAIL

POSTED SPEED	N/A
DESIGN SPEED	18 MPH

JOB NO. : 213283
CONTROL SECTION NO. : TA 64000

ATTACHMENT A1

June 2024 - Showing SRTS Plan on the SOUTH SIDE of Main/Tyler and showing the termini at Spruce Road and Cedar Lane



LOCATION MAP

Know what's below. Call before you dig.

STANDARD PLANS

CONSTRUCTION OF THE FOLLOWING ITEMS WHERE CALLED FOR ON THE PLANS, WILL BE CONSTRUCTED ACCORDING TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD PLANS UNLESS OTHERWISE INDICATED.

STANDARD PLANS	M.D.O.T. STANDARD PLAN NO.
COVER B	R-7-F
MONUMENT BOXES	R-11-E
COVER K	R-15-G
CURB RAMP AND DETECTABLE WARNING DETAILS	R-28-K*
DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALKS	R-29-J*
CONCRETE CURB AND CONCRETE CURB & GUTTER	R-30-G
UTILITY TRENCHES	R-83-C
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	R-96-E
SEEDING AND TREE PLANTING	R-100-I*
* DENOTES SPECIAL DETAIL INCLUDED IN PROPOSAL	
TRAFFIC AND SAFETY STANDARD PLANS	
GROUND DRIVEN SIGN SUPPORTS FOR TEMPORARY SIGNS	WZD-100-A
TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E
PERMANENT PAVEMENT MARKINGS	
LONGITUDINAL LINE TYPES AND PLACEMENT	PAVE-905-E
INTERSECTION, STOP BAR, AND CROSS WALK MARKINGS	PAVE-945-D

GENERAL NOTES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, A CONTRACTOR SHALL PROVIDE A DIG NOTICE TO THE NOTIFICATION SYSTEM AT LEAST 72 HOURS, BUT NOT MORE THAN 14 CALENDAR DAYS, BEFORE THE START OF ANY BLASTING OR EXCAVATION. IF THE DIG NOTICE IS GIVEN DURING BUSINESS HOURS, THE 72-HOUR PERIOD SHALL BE MEASURED FROM THE TIME THE DIG NOTICE IS MADE TO THE NOTIFICATION SYSTEM. IF A DIG NOTICE IS GIVEN BEFORE 7 A.M. ON A BUSINESS DAY, THE 72-HOUR PERIOD BEGINS AT 7 A.M. ON THAT DAY. IF A DIG NOTICE IS GIVEN ON A NONBUSINESS DAY OR AFTER 5 P.M. ON A BUSINESS DAY, THE 72-HOUR PERIOD BEGINS AT 7 A.M. ON THE NEXT BUSINESS DAY. ALL HOURS OF NONBUSINESS DAYS ARE EXCLUDED IN COUNTING THE 72-HOUR PERIOD. IF THERE ARE MULTIPLE EXCAVATORS ON THE SAME SITE, EACH EXCAVATOR SHALL PROVIDE ITS OWN DIG NOTICE.

THE PLACING OF PAVEMENT MARKING AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2011 EDITION, AS AMENDED.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

THE PLANS HEREIN WERE DESIGNED USING AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES 2012.

INDEX OF DRAWINGS

DESCRIPTION	SHEET NO.
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RAMP DETAILS	16-17
DETOUR PLAN	18
NOTES & DETAILS	19
SPECIAL DETAILS	20-21

PROJECT LENGTH: 1.19 MILES

CONTRACT FOR: SHARED USE PATH, HMA PAVING, ADA RAMPS, PAVEMENT MARKINGS, SIGNAGE, DRAINAGE IMPROVEMENTS AND ALL RELATED WORK IN THE CITY OF HART, OCEANA COUNTY

CITY OF HART APPROVAL

ROB SPLANE, CITY OF HART — DATE

PLANS PREPARED UNDER SUPERVISION OF:

LAWRENCE HUMMEL, P.E.
REGISTERED PROFESSIONAL ENGINEER No. 6201045736
FLEIS & VANDENBRINK ENGINEERING, INC.

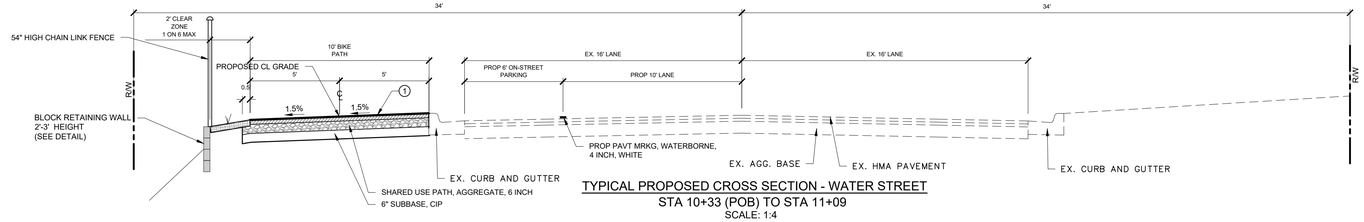
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Muskegon, MI 49440
P: 231.726.1000
F: 231.726.2200

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL

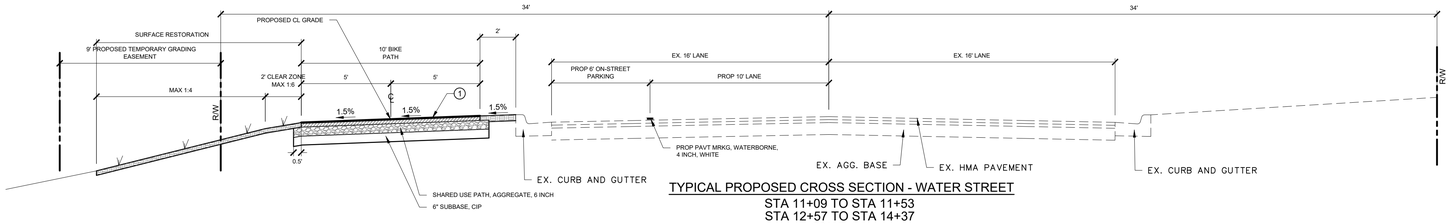
JUNE 2024

F&V PROJECT NO.
853030

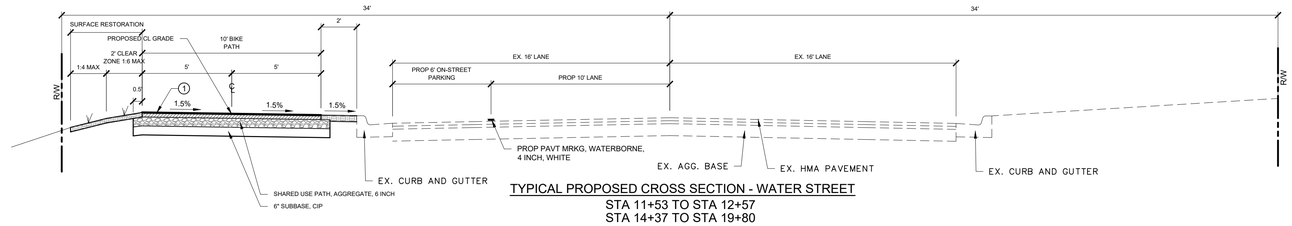
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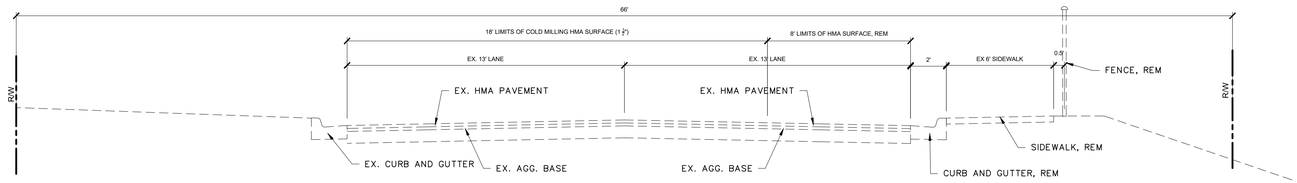
TYPICAL PROPOSED CROSS SECTION - WATER STREET
STA 10+33 (POB) TO STA 11+09
SCALE: 1:4



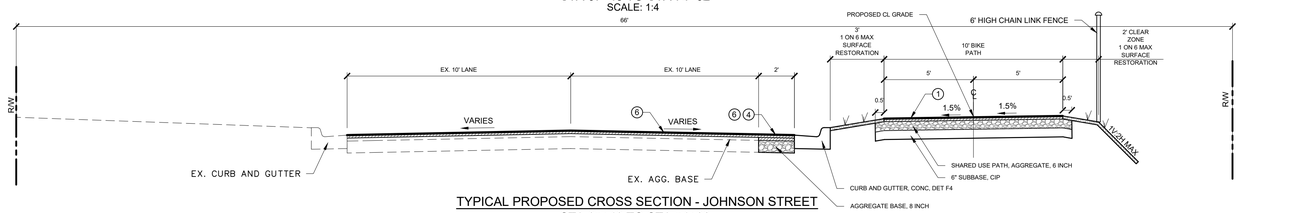
TYPICAL PROPOSED CROSS SECTION - WATER STREET
STA 11+09 TO STA 11+53
STA 12+57 TO STA 14+37
SCALE: 1:4



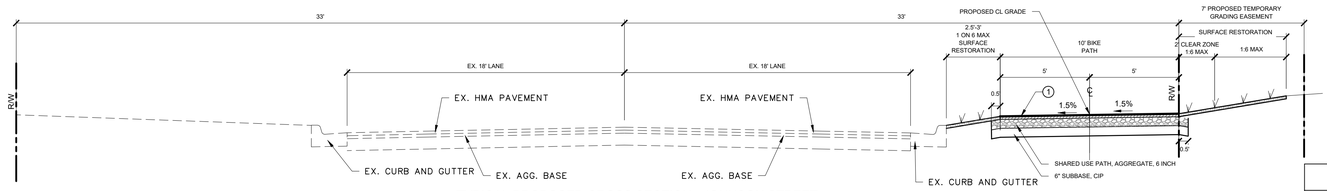
TYPICAL PROPOSED CROSS SECTION - WATER STREET
STA 11+53 TO STA 12+57
STA 14+37 TO STA 19+80
SCALE: 1:4



TYPICAL EXISTING CROSS SECTION - JOHNSON STREET
STA 67+48 TO STA 74+02
SCALE: 1:4



TYPICAL PROPOSED CROSS SECTION - JOHNSON STREET
STA 67+48 TO STA 74+02
SCALE: 1:4



TYPICAL PROPOSED CROSS SECTION - JOHNSON STREET
STA 60+14 TO STA 67+48
SCALE: 1:4

HMA APPLICATION TABLE						
COURSE	TYPE	PAY ITEM	EST. YIELD	BINDER GRADE	AWI	REMARKS
1	SHARED USE PATH	SHARED USE PATH, HMA	220 LBS/SYD	PG 58-28	-	HMA, 5EL
2	DRIVEWAY BASE	HMA APPROACH	165 LBS/SYD	PG 58-28	-	HMA, 5EL
3	DRIVEWAY TOP	HMA APPROACH	220 LBS/SYD	PG 58-28	-	HMA, 5EL
4	HAND PATCHING BASE	HAND PATCHING	165 LBS/SYD	PG 58-28	-	HMA, 5EL
5	HAND PATCHING TOP	HAND PATCHING	165 LBS/SYD	PG 58-28	-	HMA, 5EL
6	SURFACE	HMA, 5EL	165 LBS/SYD	PG 58-28	260	

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OCEANA COUNTY
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TYPICAL CROSS SECTIONS

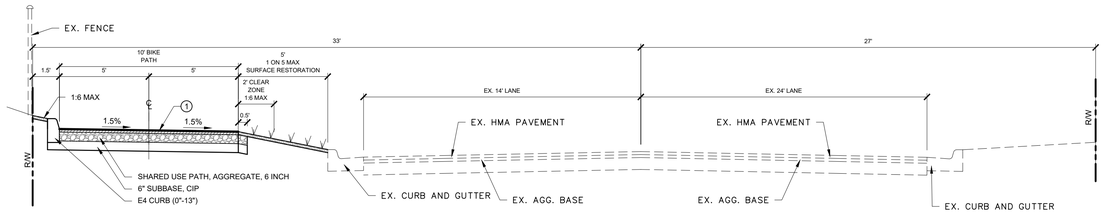
DESIGN TEAM:
PROJ MNGR: LBH
DESIGNED BY: PMT
DRAWN BY: PMT
CHECK BY:

DRAWING INFORMATION:
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052824 petert

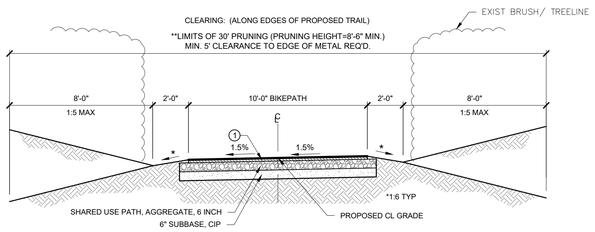
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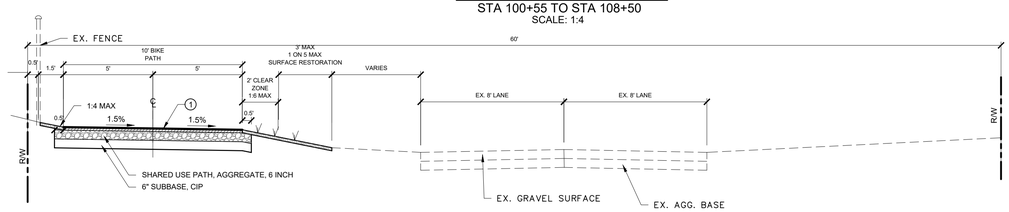
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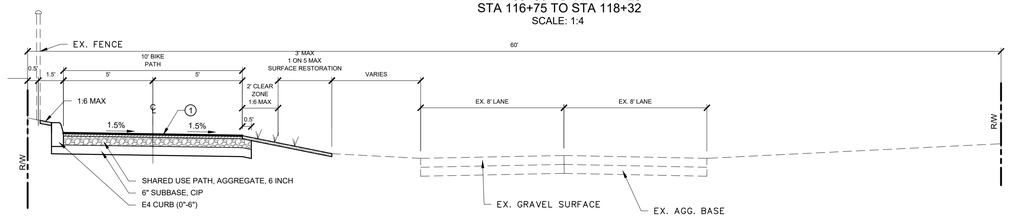
TYPICAL PROPOSED CROSS SECTION - PEACH STREET
STA 80+97 TO STA 82+51
SCALE: 1:4



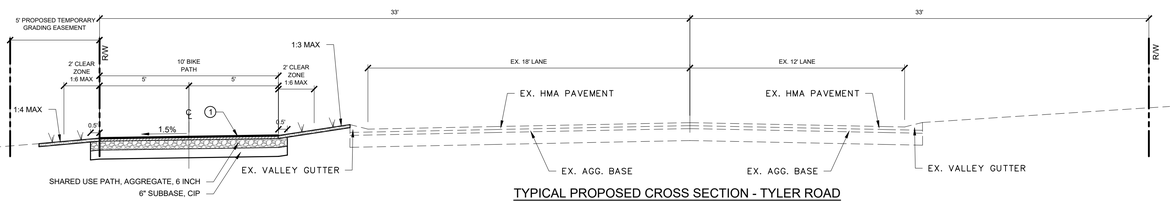
PEACH AVENUE TO PLUM STREET
STA 100+55 TO STA 108+50
SCALE: 1:4



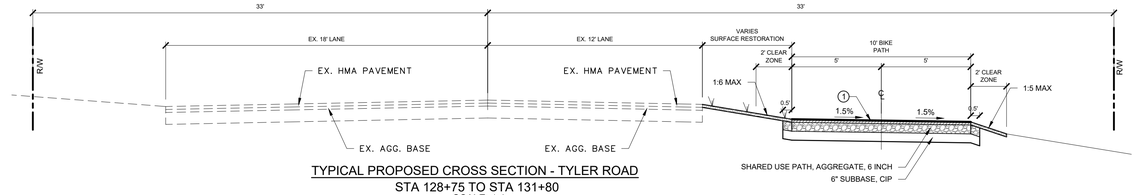
TYPICAL PROPOSED CROSS SECTION - PLUM STREET
STA 108+50 TO STA 114+25
STA 116+75 TO STA 118+32
SCALE: 1:4



TYPICAL PROPOSED CROSS SECTION - PLUM STREET
STA 114+25 TO STA 116+75
SCALE: 1:4



TYPICAL PROPOSED CROSS SECTION - TYLER ROAD
STA 120+00 TO STA 132+00
SCALE: 1:4



TYPICAL PROPOSED CROSS SECTION - TYLER ROAD
STA 128+75 TO STA 131+80
SCALE: 1:4

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SAFE ROUTES TO SCHOOL
TYPICAL CROSS SECTIONS

DESIGN TEAM:
PROJ MNGR: LBH
DESIGNED BY: PMT
DRAWN BY: PMT
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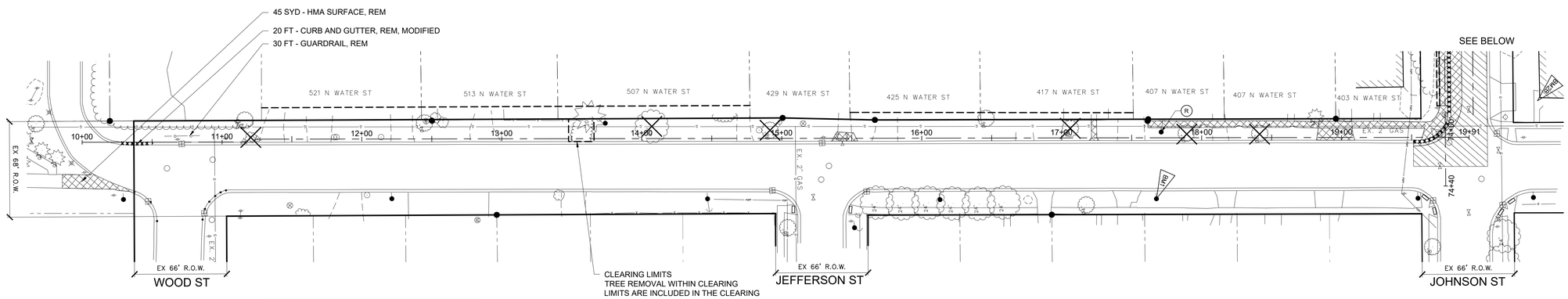
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JUNE 2024

F&V PROJECT NO.
853030

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BM #1 EL. 658.66'
SET SPIKE IN W SIDE OF POWER POLE
224' S OF WATER AND JOHNSON
223' N OF WATER AND JEFFERSON

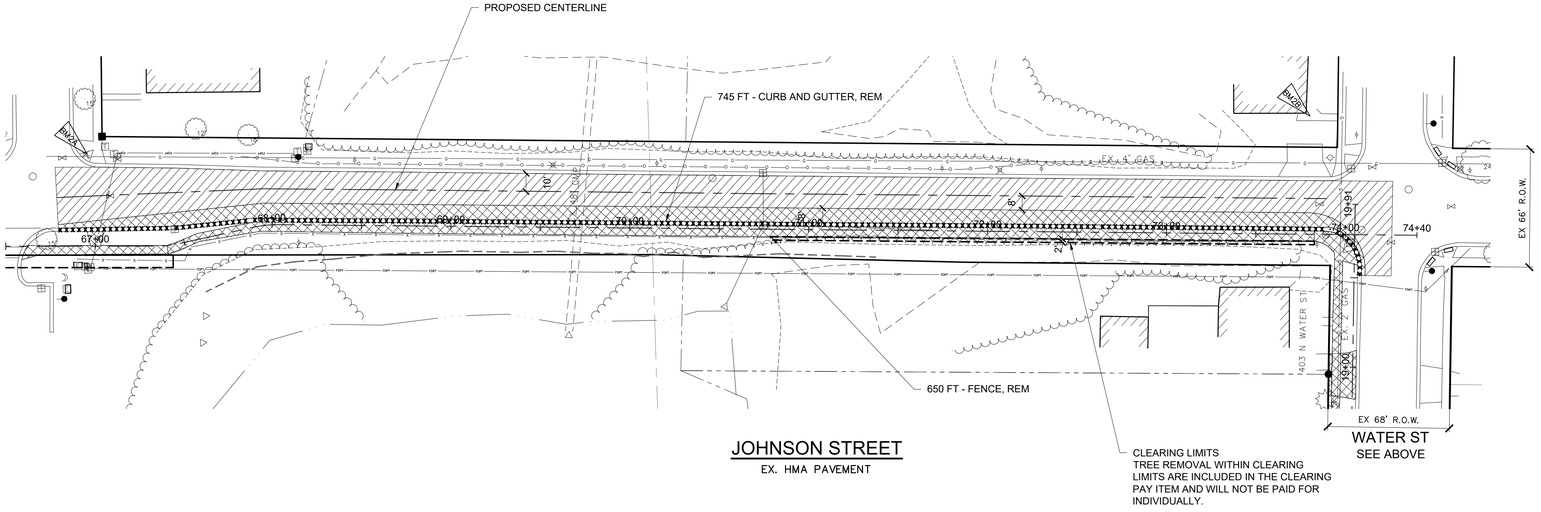


WATER STREET
EX. HMA PAVEMENT

DRIVE QUANTITIES (THIS SHEET)		
STA	PAVT, REM	SIDEWALK, REM
	SYD	SYD
15+45 LT	15	
17+23 LT		10
19+02 LT	30	
TOTALS	**45**	**10**

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
625	SYD	HMA SURFACE, REM
1675	SYD	COLD MILLING HMA SURFACE
545	SYD	SIDEWALK, REM
5	EA	STUMP, REM, 6 TO 18 INCH
1	EA	STUMP, REM, 19 INCH TO 36 INCH
0.25	ACRE	CLEARING

LEGEND
- (R) RELOCATE EXISTING ITEM (BY OTHERS)
- PAVT, REM, SIDEWALK, REM & HMA SURFACE, REM
- COLD MILLING HMA SURFACE
- TREE STUMP REMOVAL
- X X X X REMOVE EXISTING CURB AND GUTTER



JOHNSON STREET
EX. HMA PAVEMENT

NORTH

SCALE IN FEET 0 40 80

VERTICAL SCALE 0 4

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OCEANA COUNTY
SAFE ROUTES TO SCHOOL
REMOVALS

DESIGN TEAM: PROJ MNGR: LBH
DESIGNED BY: PMT
DRAWN BY: PMT
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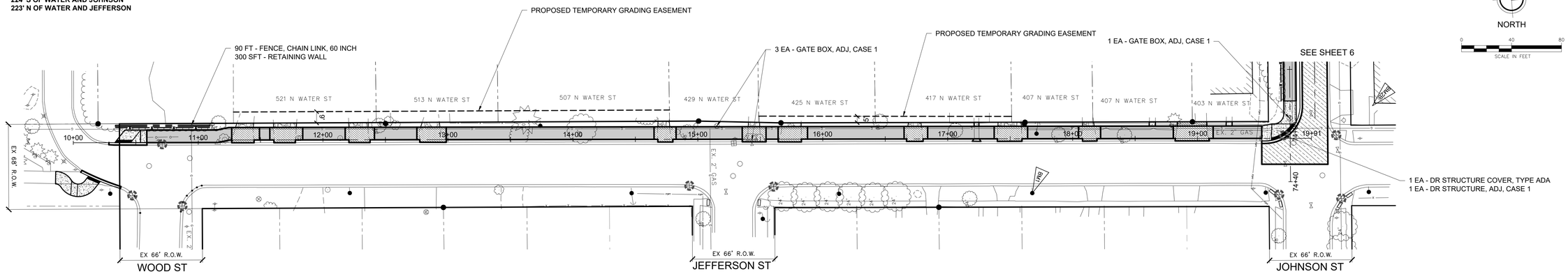
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BM #1 EL. 658.66'
SET SPIKE IN W SIDE OF POWER POLE
224' S OF WATER AND JOHNSON
223' N OF WATER AND JEFFERSON

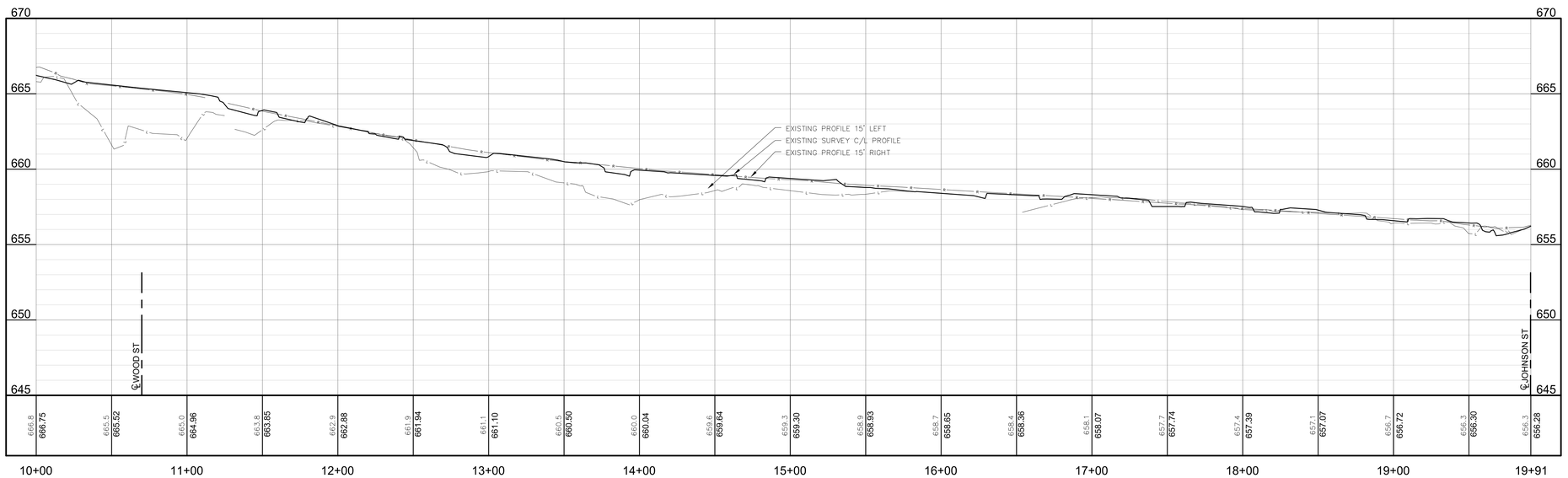


WATER STREET
EX. HMA PAVEMENT

DRIVE QUANTITIES (THIS SHEET)					
STA	APPROACH CL I, 6 INCH	APPROACH CL II, 6 INCH	SUBBASE, CIP	HMA, APPROACH	SIDEWALK, CONC, 4 INCH
	SYD	SYD	CYD	TON	SFT
11+37 LT	30	10	5	10	
11+69 LT	35	10	10	10	
12+27 LT	30	10	5	10	
12+86 LT	35	10	10	10	
14+73 LT	25	5	5	5	
15+45 LT	30	10	5	10	
15+73 LT	35	10	10	10	
16+74 LT	25	5	5	5	
17+23 LT			5		5
17+51 LT	35	10	10	10	
18+13 LT	25	5	5	5	
18+64 LT			5		5
19+02 LT	50		10	10	
19+25 LT			5		5
TOTALS	**355**	**85**	**95**	**95**	**15**

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
940	FT	SHARED USE PATH, GRADING
800	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
90	TON	SHARED USE PATH, HMA
160	CYD	SUBBASE, CIP
1060	SFT	CURB RAMP, CONC, 6 INCH
50	FT	CURB AND GUTTER, CONC, DET F4
65	FT	CURB RAMP OPENING, CONC
50	FT	DETECTABLE WARNING SURFACE, DI
5	TON	HAND PATCHING
25	SYD	AGGREGATE BASE, 8 INCH
4	EA	POST, MAILBOX
10	EA	EROSION CONTROL, INLET PROTECTION, FABRIC DROP

LEGEND
- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA OR HMA APPROACH
- SIDEWALK, CONC, 4 INCH
- HMA DRIVEWAY APPROACH
- CURB AND GUTTER, CONC, DET F4
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI



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REVISION:

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL
PLAN AND PROFILE

DESIGN TEAM:	PROJ MNGR: LBH
	DESIGNED BY: PMT
	DRAWN BY: PMT
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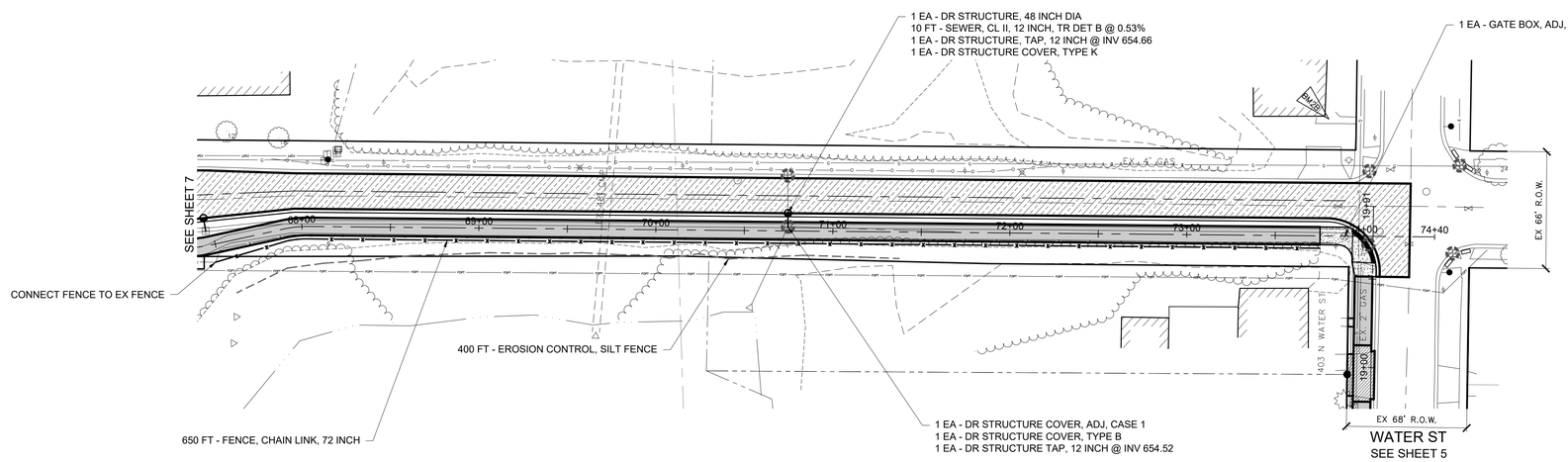
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BM #2B EL. 656.39'
SET MARK IN CONCRETE
@ NW QUAD OF WATER AND JOHNSON
37.2' NW OF CBSQ

NORTH

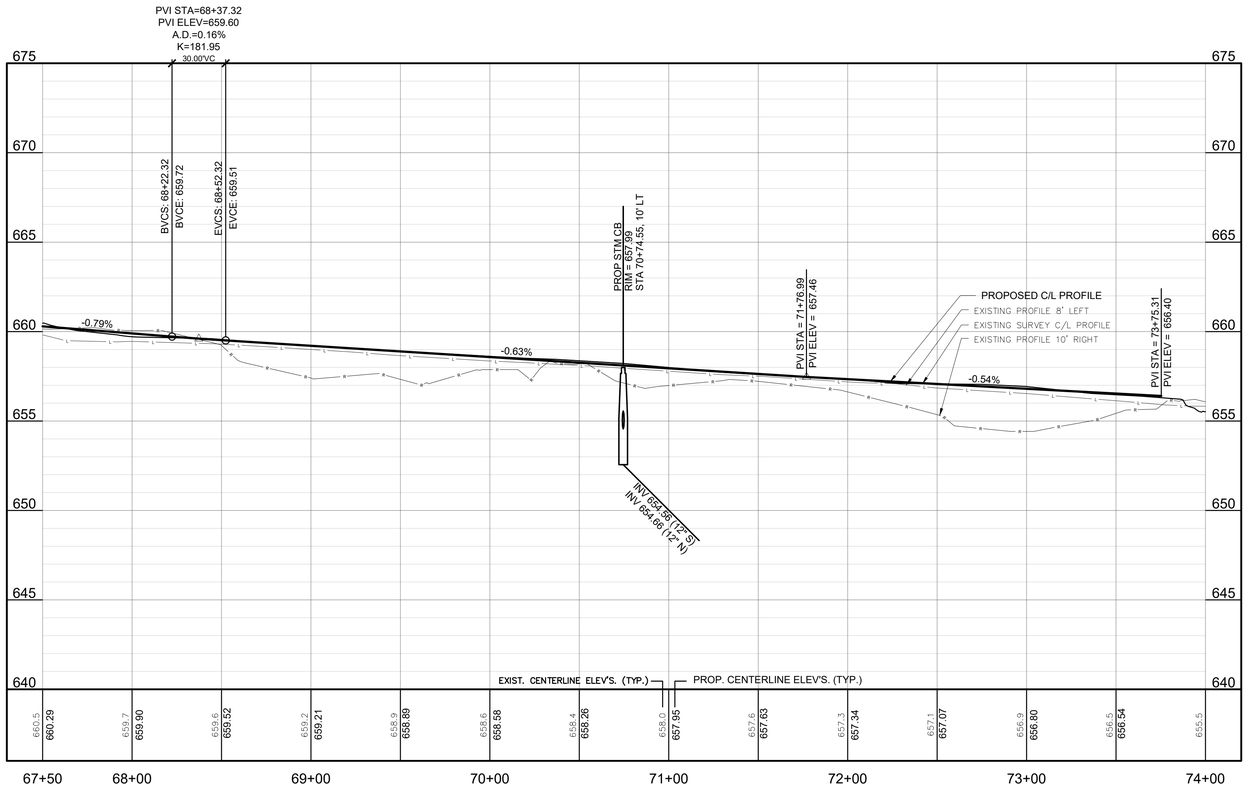
SCALE IN FEET 0 40 80

VERTICAL SCALE 0 4



JOHNSON STREET

EX. HMA PAVEMENT



MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
650	FT	SHARED USE PATH, GRADING
770	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
85	TON	SHARED USE PATH, HMA
130	CYD	SUBBASE, CIP
630	FT	CURB AND GUTTER, CONC, DET F4
15	TON	HAND PATCHING
155	SYD	AGGREGATE BASE, 8 INCH
150	TON	HMA, 5EL
3	EA	EROSION CONTROL, INLET PROTECTION, FABRIC DROP

LEGEND

- PLACE SHARED USE PATH, HMA
- PLACE SURFACE HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- EROSION CONCTOL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI
- FENCE, CHAIN LINK, 72 INCH
- EROSION CONTROL, SILT FENCE

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OCEANA COUNTY
SAFE ROUTES TO SCHOOL

PLAN AND PROFILE

DESIGN TEAM: PROJ MNGR: LBH; DESIGNED BY: PMT; DRAWN BY: PMT; CHECK BY:

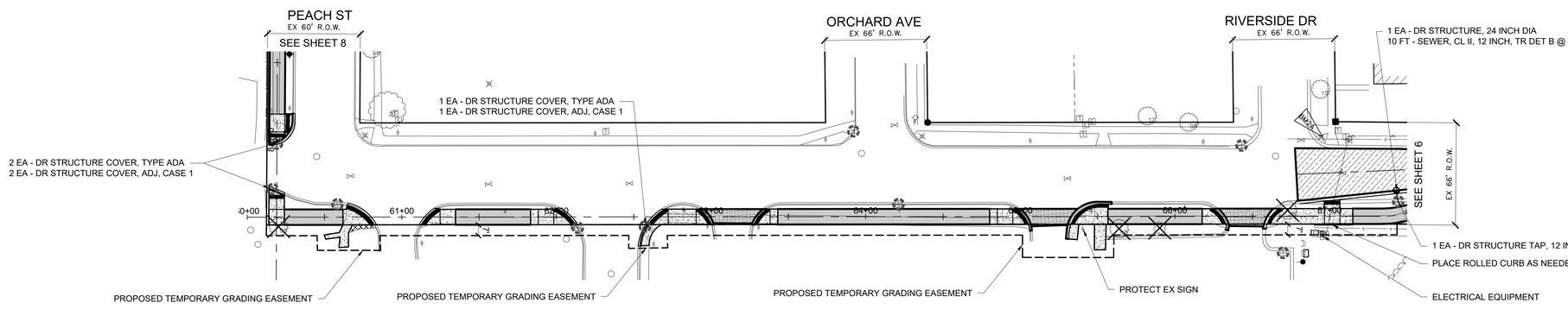
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JUNE 2024

F&V PROJECT NO. 853030

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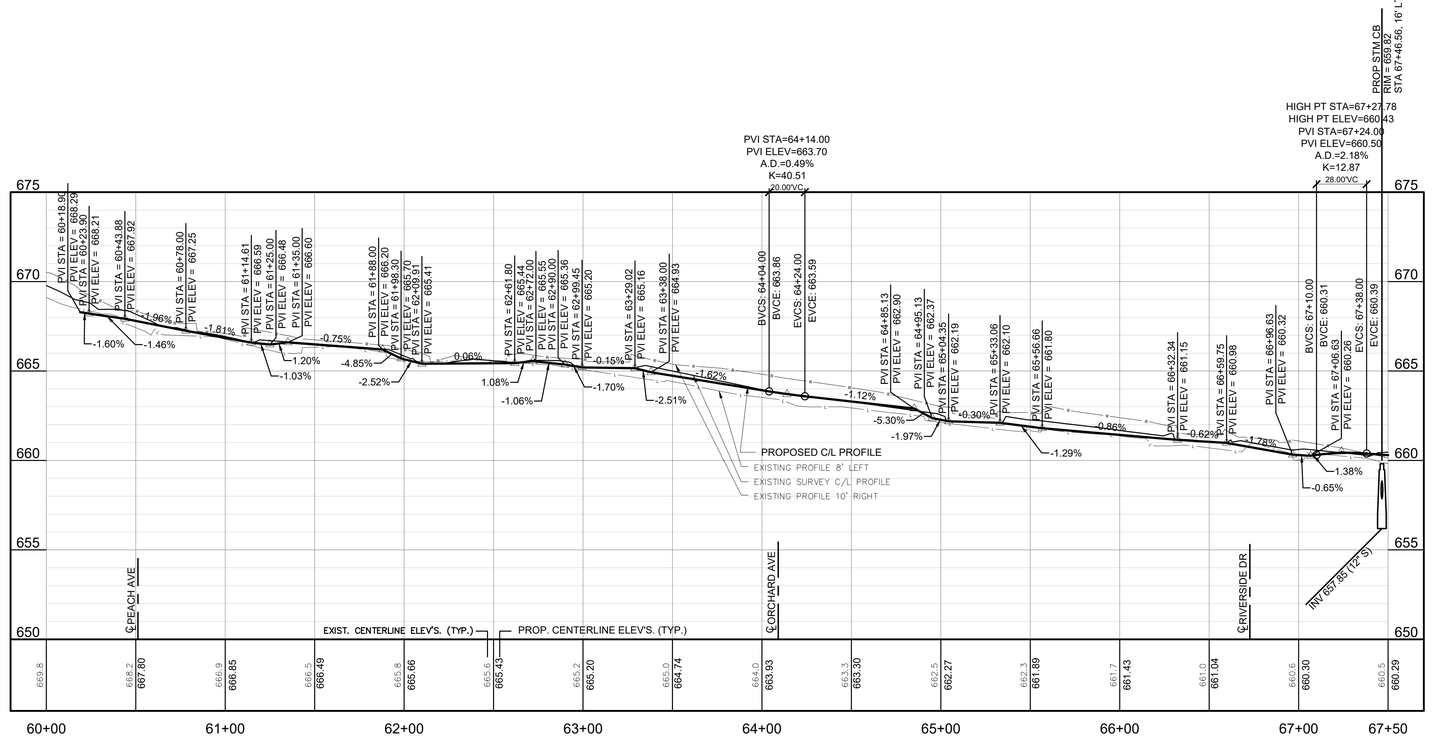
BM #2A EL. 661.04'
SET MARK ON E SIDE OF LIGHT POLE
@ NE QUAD OF JOHNSON AND RIVERSIDE
31' S OF 15" TREE



JOHNSON STREET
EX. HMA PAVEMENT

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
430	SYD	SIDEWALK, REM
3	EA	STUMP, REM, 6 TO 18 INCH
280	FT	CURB AND GUTTER, REM, MODIFIED

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
320	FT	SHARED USE PATH, GRADING
400	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
50	TON	SHARED USE PATH, HMA
250	CYD	SUBBASE, CIP
100	FT	CURB AND GUTTER, CONC, DET F4
250	FT	CURB RAMP OPENING, CONC
25	TON	HMA, 5EL
30	TON	HAND PATCHING
165	SYD	AGGREGATE BASE, 8 INCH
3000	SFT	CURB RAMP, CONC, 6 INCH
215	FT	DETECTABLE WARNING SURFACE, DI
10	EA	EROSION CONTROL, INLET PROTECTION, FABRIC DROP



LEGEND

- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- SIDEWALK, REM & PLACE AGGREGATE BASE, 8 INCH & HAND PATCHING
- PLACE CURB RAMP, CONC, 6 INCH
- CURB AND GUTTER, CONC, DET F4
- RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI

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REVISION:

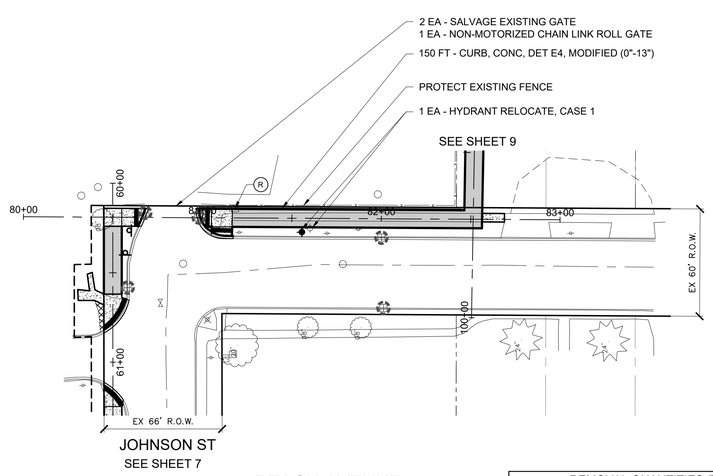
CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL
PLAN AND PROFILE

DESIGN TEAM:	PROJ MNGR: LBH DESIGNED BY: PMT DRAWN BY: PMT CHECK BY:

DRAWING INFORMATION:
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052424 petert

JUNE 2024
F&V PROJECT NO.
853030

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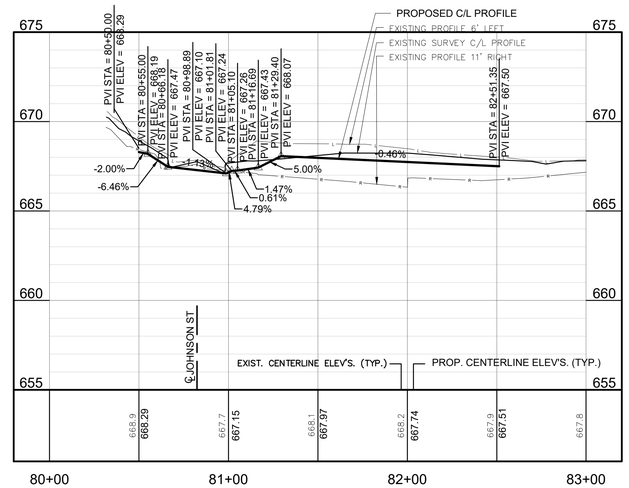


PEACH AVENUE

EX. HMA PAVEMENT

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
90	SYD	SIDEWALK, REM

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
140	FT	SHARED USE PATH, GRADING
175	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
25	TON	SHARED USE PATH, HMA
30	CYD	SUBBASE, CIP
60	SFT	SIDEWALK, CONC, 4 INCH
2	EA	EROSION CONTROL, INLET PROTECTION, FABRIC DROP



LEGEND

- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- (R) RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI

NORTH

0 40 80
SCALE IN FEET

0 4
VERTICAL SCALE

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F: 231.726.2200

REVISION:

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL

PLAN AND PROFILE

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DESIGN TEAM: PROJ MNGR: LBH
DESIGNED BY: PMT
DRAWN BY: PMT
CHECK BY:

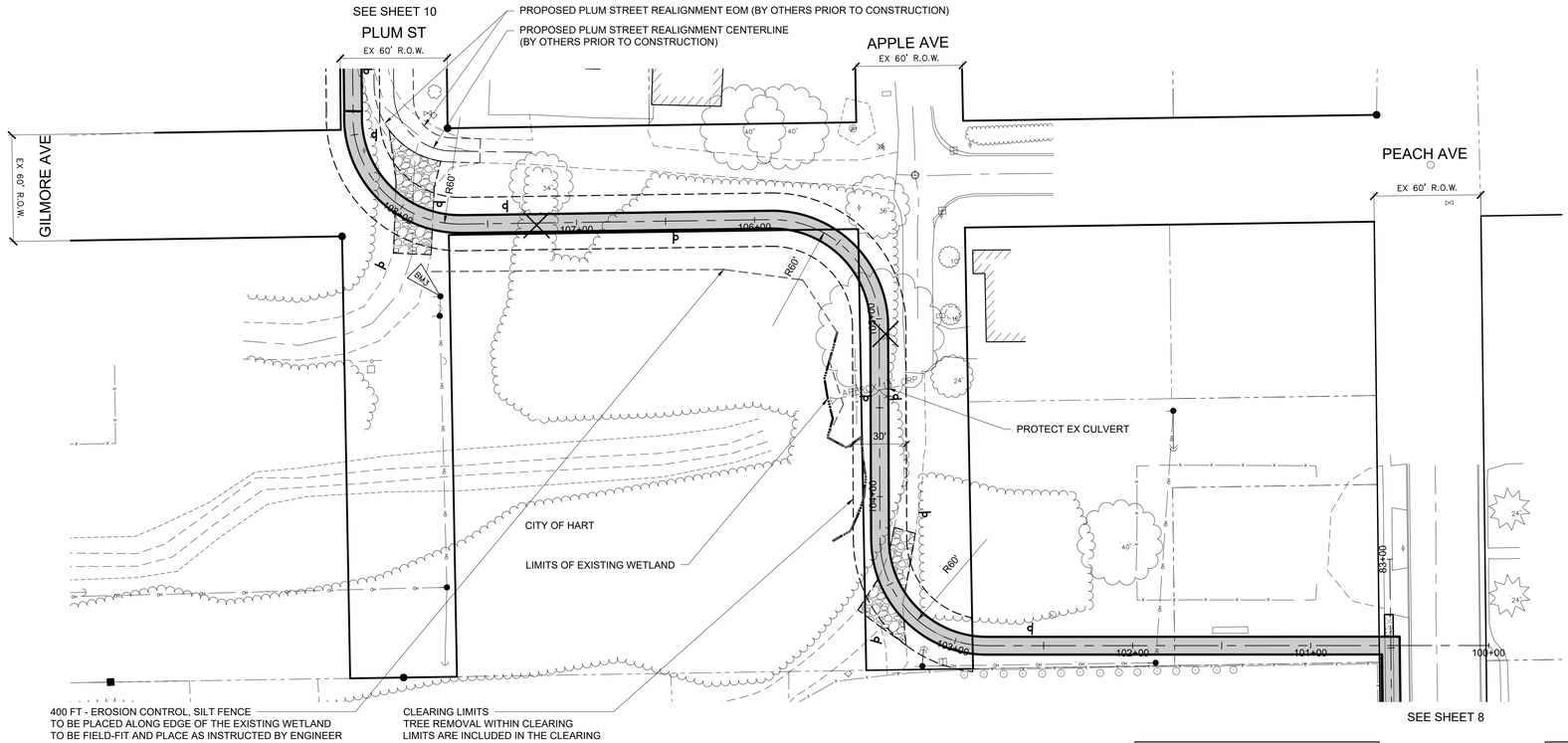
DRAWING INFORMATION:
853030_8
053024 petert

JUNE 2024

F&V PROJECT NO.
853030

M:\Proj\853001-855000\853030 Hart – Safe Routes to School 2021\Civil\Pro\853030_8.dwg – plotted on 5/30/2024 11:04 AM

BM #3 EL. 669.84'
SET NAIL IN W SIDE OF POWER POLE
@ SE QUAD OF CHERRY AND GILMORE
72' S OF GILMORE & 11.5' E OF CHERRY

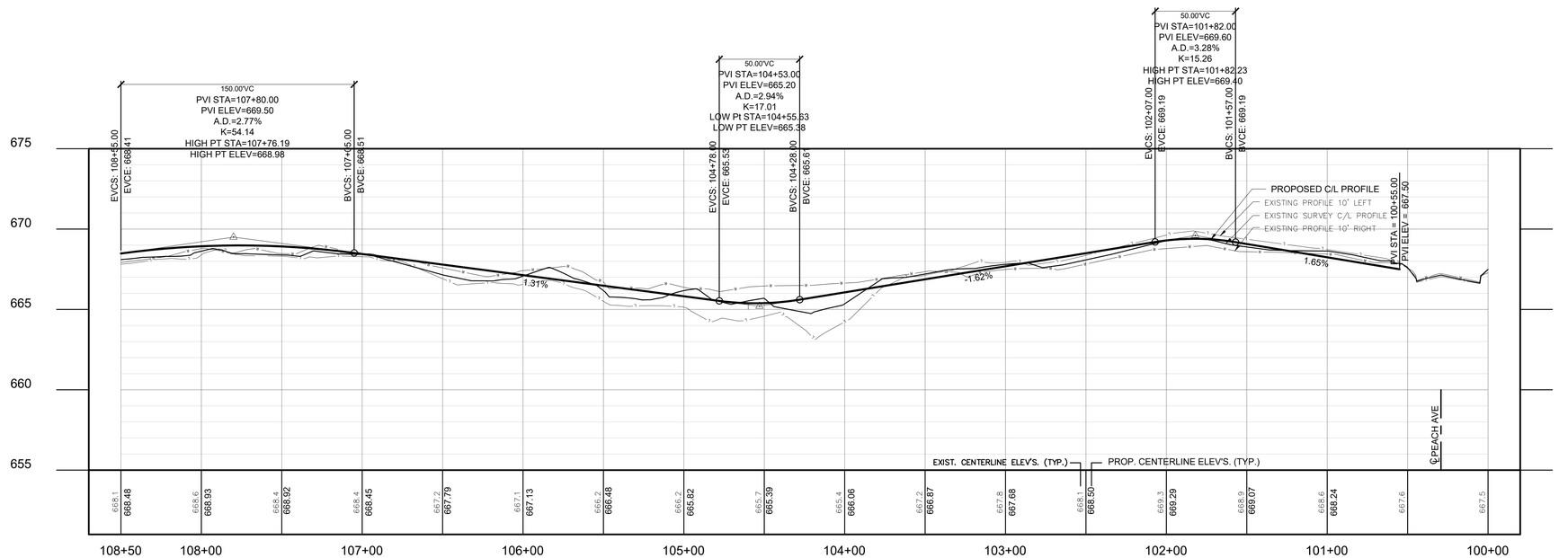


PEACH AVENUE TO PLUM STREET

EX. GRASS

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
0.50	ACRE	CLEARING

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
810	FT	SHARED USE PATH, GRADING
990	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
110	TON	SHARED USE PATH, HMA
170	CYD	SUBBASE, CIP
200	SYD	APPROACH, CL II, 6 INCH



LEGEND

- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI

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NORTH
0 40 80
SCALE IN FEET
0 4
VERTICAL SCALE

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PLAN AND PROFILE

DESIGN TEAM:	PROJ MNGR: LBH DESIGNED BY: PMT DRAWN BY: PMT CHECK BY:

DRAWING INFORMATION:
853030_9
052824 petert

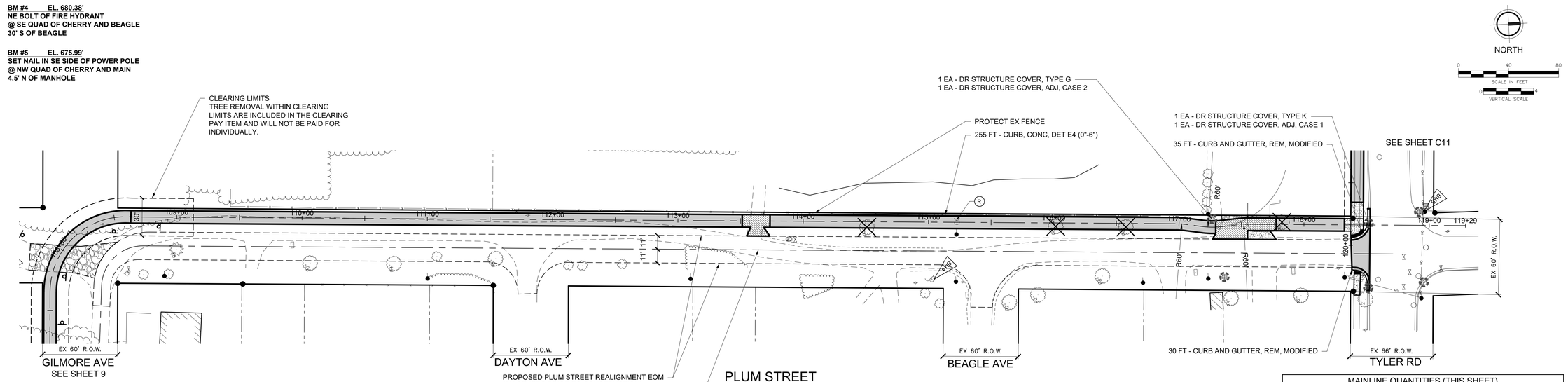
JUNE 2024

F&V PROJECT NO.
853030

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BM #4 EL. 680.38'
NE BOLT OF FIRE HYDRANT
@ SE QUAD OF CHERRY AND BEAGLE
30' S OF BEAGLE

BM #5 EL. 675.99'
SET NAIL IN SE SIDE OF POWER POLE
@ NW QUAD OF CHERRY AND MAIN
4.5' N OF MANHOLE



LEGEND

- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- (R) RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI

DRIVE QUANTITIES (THIS SHEET)

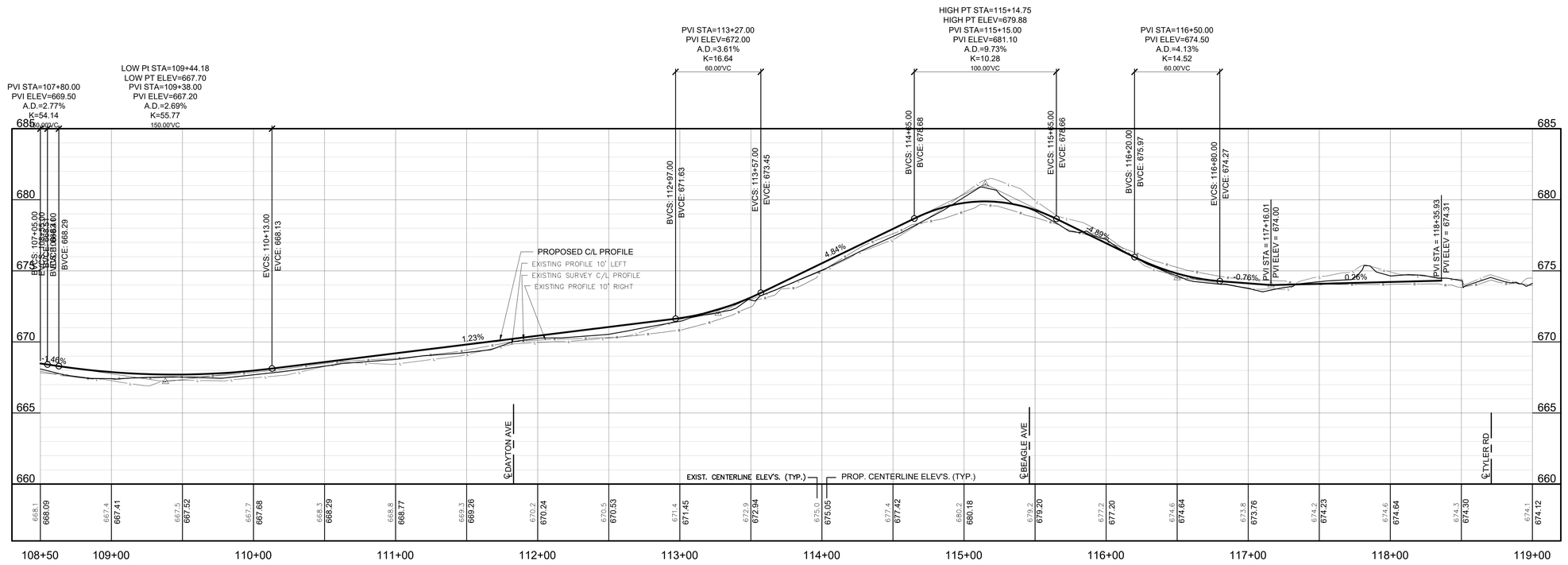
STA	APPROACH CL I, 6 INCH	APPROACH CL II, 6 INCH	HMA, APPROACH	DRIVEWAY, NONREINF CONC, 6 INCH	SUBBASE, CIP	PAVT, REM
	SYD	SYD	TON	SYD	CYD	SYD
113+64 LT	40	10	10		10	
117+45 LT	30	10	10		10	
117+64 LT	40		10	20	10	25
TOTALS	**110**	**20**	**30**	**20**	**30**	**25**

REMOVAL QUANTITIES (THIS SHEET)

QUANTITY	UNIT	DESCRIPTION
15	SYD	SIDEWALK, REM
8	EA	STUMP, REM, 6 INCH TO 18 INCH
2	EA	STUMP, REM, 19 INCH TO 36 INCH

MAINLINE QUANTITIES (THIS SHEET)

QUANTITY	UNIT	DESCRIPTION
1000	FT	SHARED USE PATH, GRADING
1100	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
125	TON	SHARED USE PATH, HMA
425	SFT	CURB RAMP, CONC, 6 INCH
50	FT	CURB AND GUTTER, CONC, DET F4
20	FT	CURB RAMP OPENING, CONC
20	FT	DETECTABLE WARNING SURFACE, DI
5	TON	HAND PATCHING
10	SYD	AGGREGATE BASE, 8 INCH
200	CYD	SUBBASE, CIP
6	EA	EROSION CONTROL, INLET PROTECTION, FABRIC DROP



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DESIGN TEAM:	PROJ MNGR: LBH DESIGNED BY: PMT DRAWN BY: PMT CHECK BY:

DRAWING INFORMATION:
853030_10
052824 petert

JUNE 2024

F&V PROJECT NO.
853030

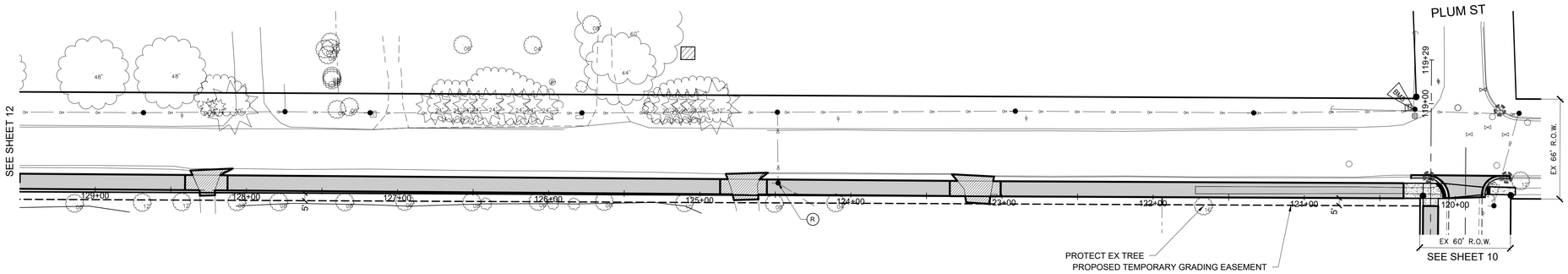
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BM #5 EL. 675.99'
SET NAIL IN SE SIDE OF POWER POLE
@ NW QUAD OF CHERRY AND MAIN
4.5' N OF MANHOLE

NORTH

0 40 80
SCALE IN FEET

0 4
VERTICAL SCALE



LEGEND

- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- (R) RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI
- HMA DRIVEWAY APPROACH

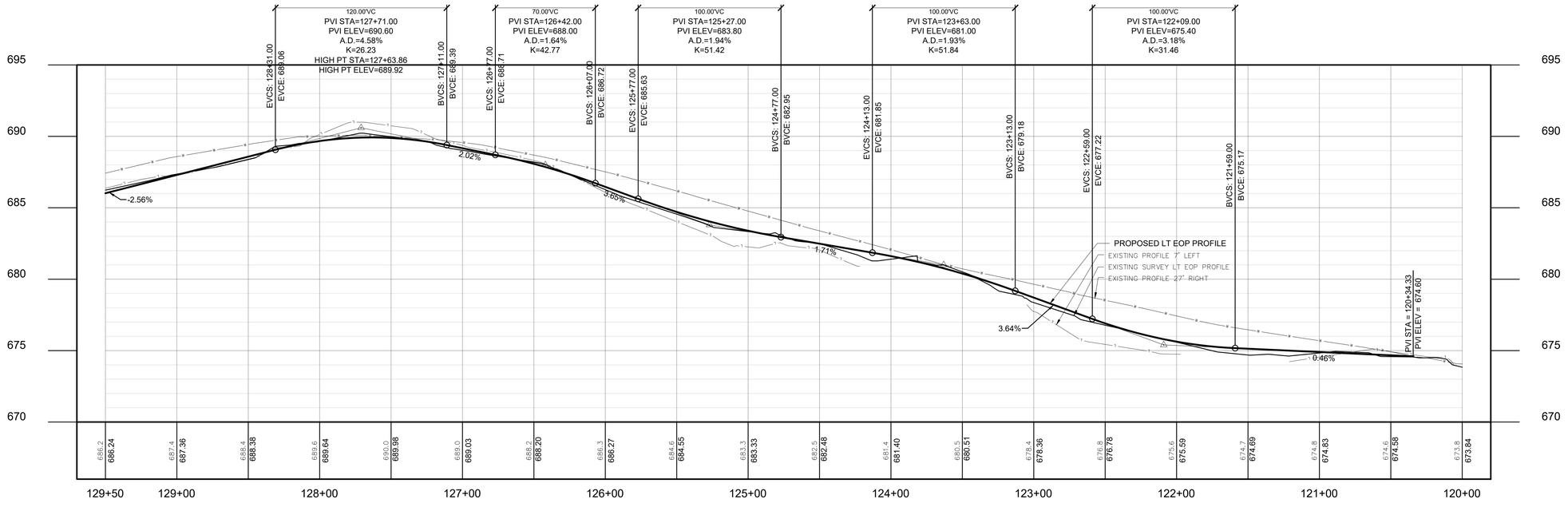
DRIVE QUANTITIES (THIS SHEET)				
STA	APPROACH CL I, 6 INCH	SUBBASE, CIP	HMA, APPROACH	PAVT, REM
	SYD	SYD	TON	SYD
123+16 LT	60	10	15	45
124+69 LT	55	10	15	40
123+16 LT	45	10	10	30
TOTALS	**160**	**30**	**40**	**115**

TYLER ROAD

EX. HMA PAVEMENT

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
85	SYD	SIDEWALK, REM

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
950	FT	SHARED USE PATH, GRADING
1010	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
115	TON	SHARED USE PATH, HMA
170	CYD	SUBBASE, CIP



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OCEANA COUNTY
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DRAWING INFORMATION:
853030_11
052424 petert

JUNE 2024

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853030

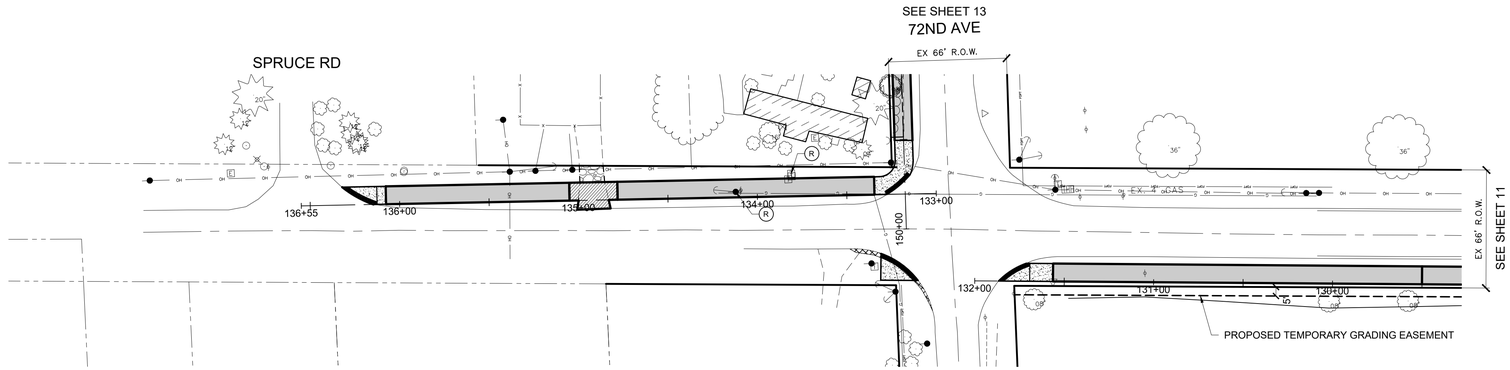
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BM #5 EL. 675.99'
SET NAIL IN SE SIDE OF POWER POLE
@ NW QUAD OF CHERRY AND MAIN
4.5' N OF MANHOLE

NORTH

0 40 80
SCALE IN FEET

0 4
VERTICAL SCALE



TYLER ROAD
EX. HMA PAVEMENT

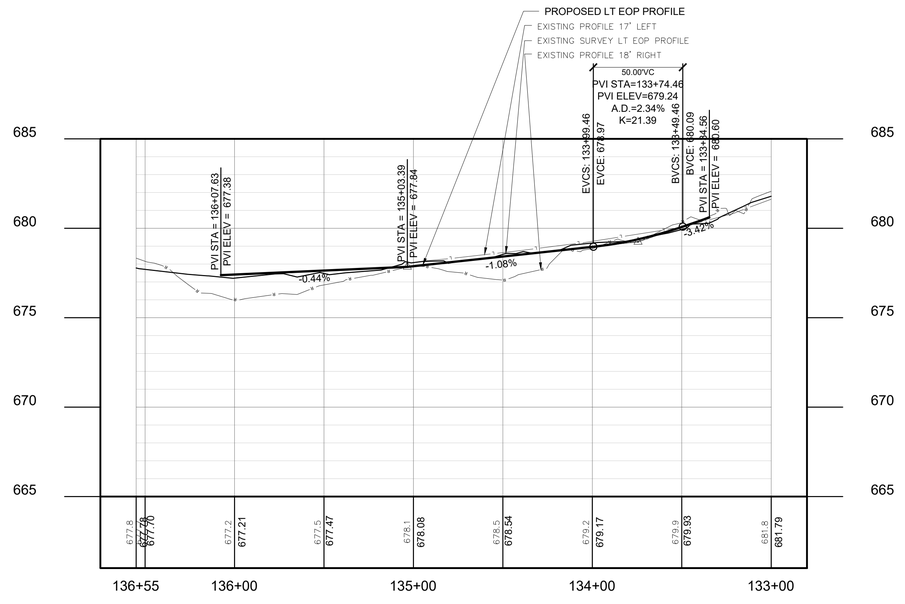
LEGEND

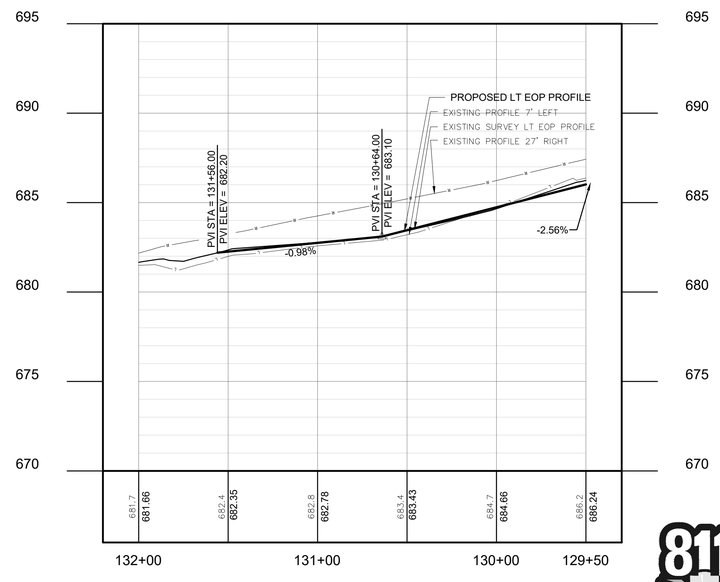
- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- (R) RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI

DRIVE QUANTITIES (THIS SHEET)				
STA	APPROACH CL I, 6 INCH	APPROACH CL I, 6 INCH	SUBBASE, CIP	HMA, APPROACH
	SYD	SYD	CYD	TON
134+90 RT	40	15	10	10
TOTALS	**40**	**15**	**10**	**10**

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
15	SYD	HMA SURFACE, REM

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
525	FT	SHARED USE PATH, GRADING
560	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
60	TON	SHARED USE PATH, HMA
150	CYD	SUBBASE, CIP
950	SFT	CURB RAMP, CONC, 6 INCH
60	FT	DETECTABLE WARNING SURFACE, DI





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DESIGN TEAM:	PROJ MNGR: LBH DESIGNED BY: PMT DRAWN BY: PMT CHECK BY:

DRAWING INFORMATION:
853030_12
052424 petert

JUNE 2024

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853030

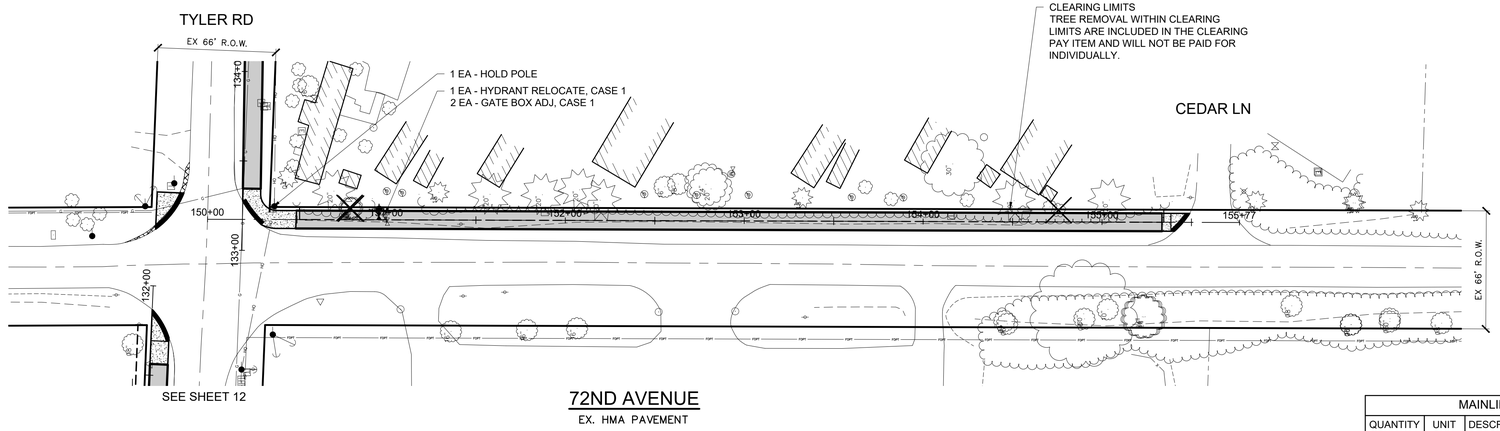
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BM #5 EL. 675.99'
SET NAIL IN SE SIDE OF POWER POLE
@ NW QUAD OF CHERRY AND MAIN
4.5' N OF MANHOLE

NORTH

0 40 80
SCALE IN FEET

0 4
VERTICAL SCALE

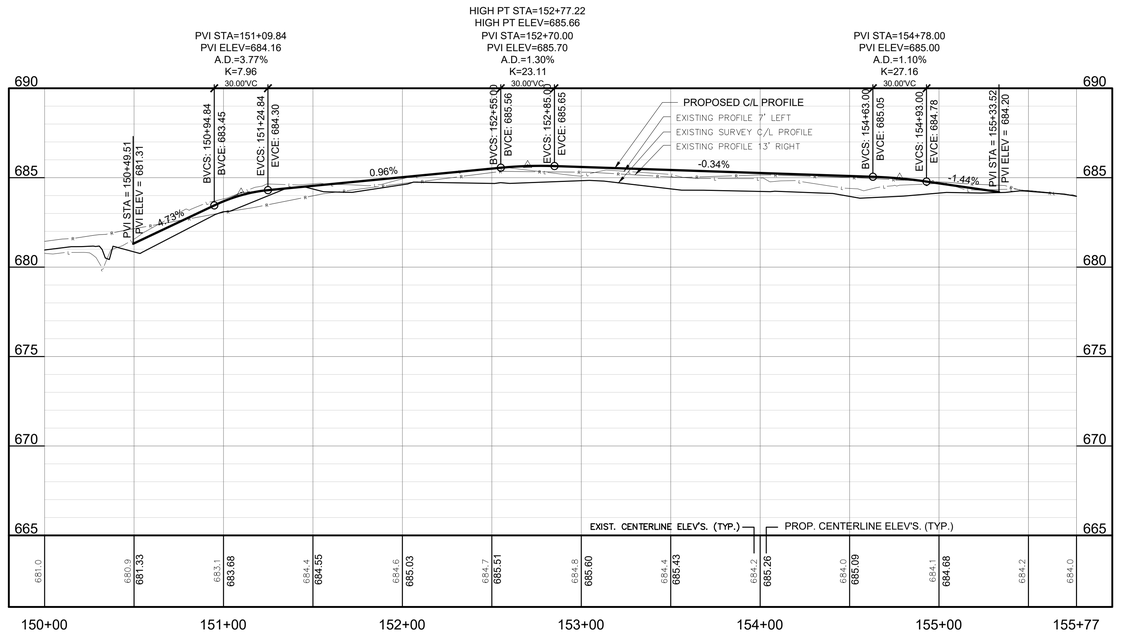


LEGEND

- REMOVE CONCRETE & PLACE SHARED USE PATH, HMA
- PLACE CONCRETE
- CURB AND GUTTER, CONC, DET F4
- (R) RELOCATE EXISTING ITEM (BY OTHERS)
- REMOVE EXISTING CONCRETE/ ASPHALT
- TREE STUMP REMOVAL
- EROSION CONTROL, INLET PROTECTION, FABRIC DROP
- DETECTABLE WARNING SURFACE, DI

REMOVAL QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
0.25	ACRE	CLEARING

MAINLINE QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
520	FT	SHARED USE PATH, GRADING
600	SYD	SHARED USE PATH, AGGREGATE, 6 INCH
65	TON	SHARED USE PATH, HMA
100	CYD	SUBBASE, CIP
15	SFT	CURB RAMP, CONC, 6 INCH
15	FT	DETECTABLE WARNING SURFACE, DI



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PLAN AND PROFILE

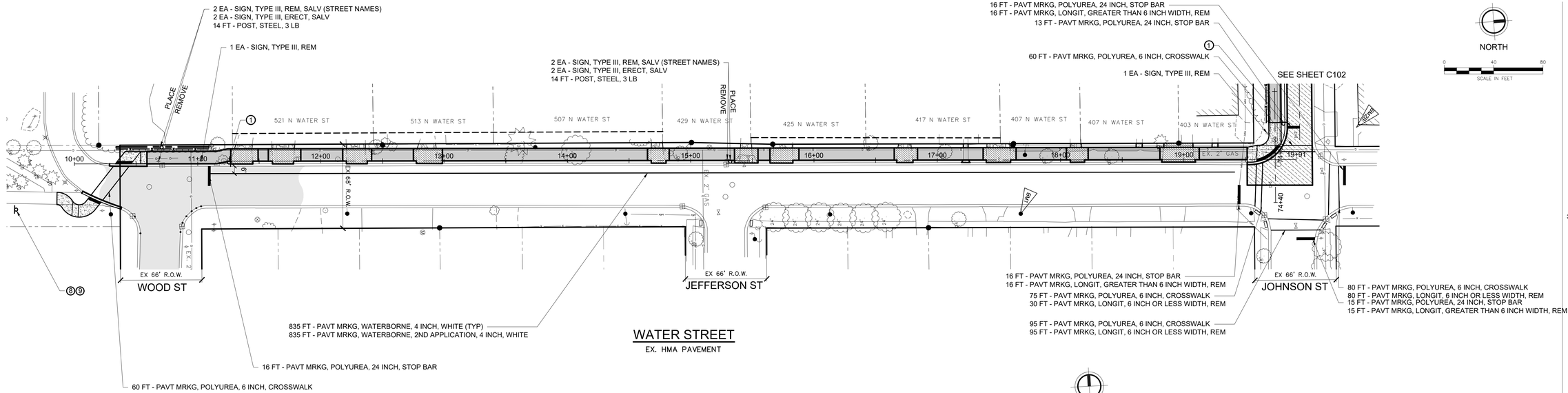
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031224 petert

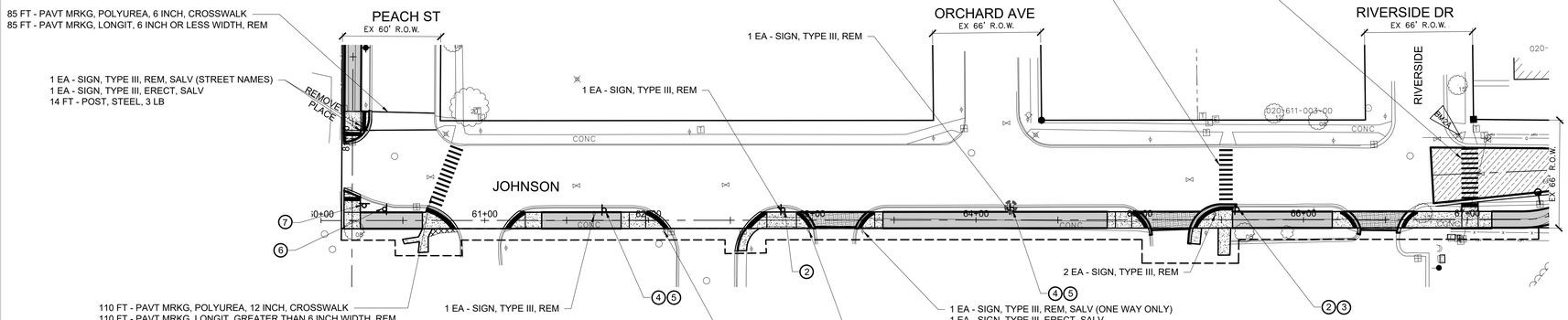
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853030

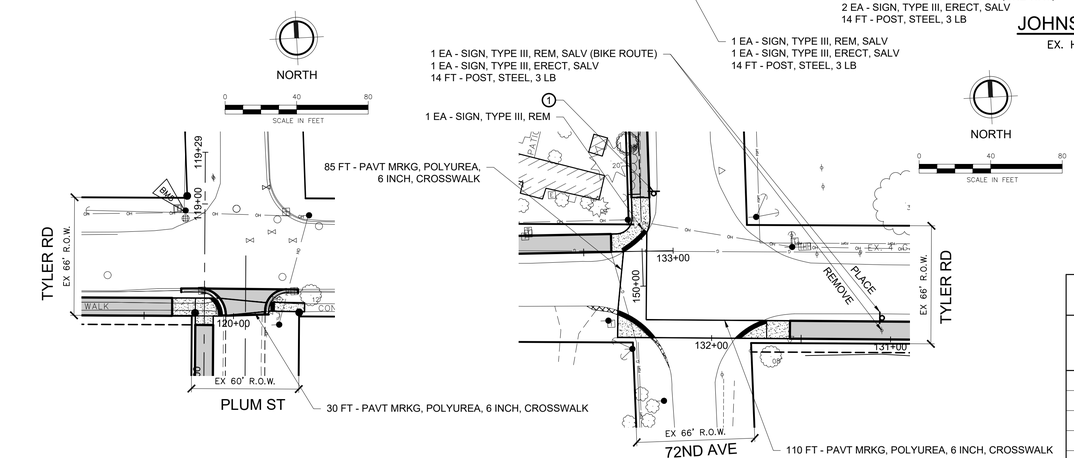
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WATER STREET
EX. HMA PAVEMENT



JOHNSON STREET
EX. HMA PAVEMENT



PERMANENT SIGNING (FOR INFORMATION ONLY)					
SIGN	TYPE	SIZE	SIGN AREA (SFT)	NUMBER	TOTAL AREA (SFT)
1	R1-1	30"x30"	6.25	3	18.8
2	S1-1	30"x30"	6.25	2	12.5
3	W16-7P	24"x12"	2	1	2.0
4	R8-3A	24"x24"	4	2	8.0
5	R7-201aP	12"x6"	0.50	2	1.0
6	W1-1R	36"x36"	9	1	9.0
7	W1-1L	36"x36"	9	1	9.0
8	W1-5R	18"x18"	2.25	1	2.3
9	SPEC	24"x18"	3.00	1	3.0
				TOTAL:	65.5

QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
115	FT	POST, STEEL, 3 LB
20	SFT	SIGN, TYPE IIIA
50	SFT	SIGN, TYPE IIIB

PERMANENT SIGNS

1. R1-1 (30" x 30")
6.25 Sft TYPE IIIA SIGN
14 FT – POST, STEEL, 3 LB

2. S1-1 (30" x 30")
6.25 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

3. W16-7P (24" x 12")
2 Sft TYPE IIIB SIGN

4. R8-3A (24" x 24")
4 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

5. R7-201aP (12" x 6")
0.5 Sft TYPE IIIB SIGN

6. W1-1R (36" x 36")
9 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

7. W1-1L (36" x 36")
9 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

8. W1-5R (18" x 18")
2.25 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

9. W1-5R (24" x 18")
3 Sft TYPE IIIB SIGN

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PERMANENT SIGNS & PAVEMENT MARKINGS

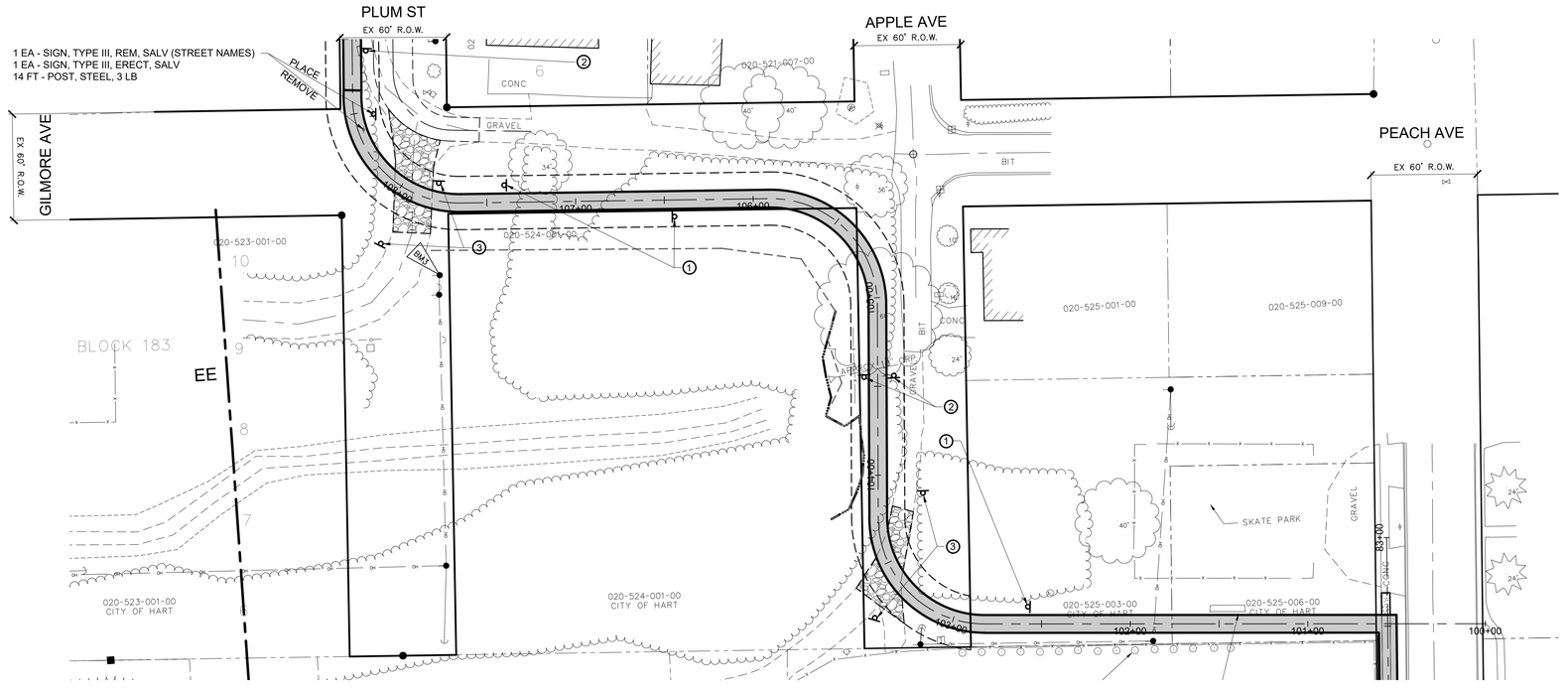
DESIGN TEAM: | PROJ MNGR: LBH | DESIGNED BY: PMT | DRAWN BY: PMT | CHECK BY:

DRAWING INFORMATION:
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031224 petert

JUNE 2024

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853030

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NORTH

0 40 80
SCALE IN FEET

QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
140	FT	POST, STEEL, 3 LB
100	SFT	SIGN, TYPE IIIB

PERMANENT SIGNING (FOR INFORMATION ONLY)					
SIGN	TYPE	SIZE	SIGN AREA (SFT)	NUMBER	TOTAL AREA (SFT)
1	W1-1R	36"x36"	9	3	27
2	W1-1L	36"x36"	9	3	27
3	SPEC	36"x36"	9	4	36
				TOTAL:	90

PERMANENT SIGNS

① W1-1R (36" x 36")
9 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

② W1-1L (36" x 36")
9 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

③ DO NOT PARK ON TRAIL
SPEC (36" x 36")
9 Sft TYPE IIIB SIGN
14 FT – POST, STEEL, 3 LB

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OCEANA COUNTY
SAFE ROUTES TO SCHOOL
PERMANENT SIGNS & PAVEMENT MARKINGS

DESIGN TEAM: PROJ MNGR: LBH
DESIGNED BY: PMT
DRAWN BY: PMT
CHECK BY:

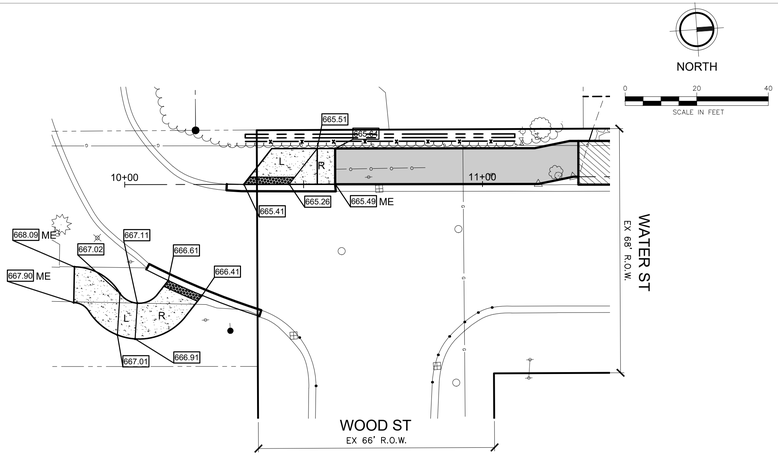
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031224 petert

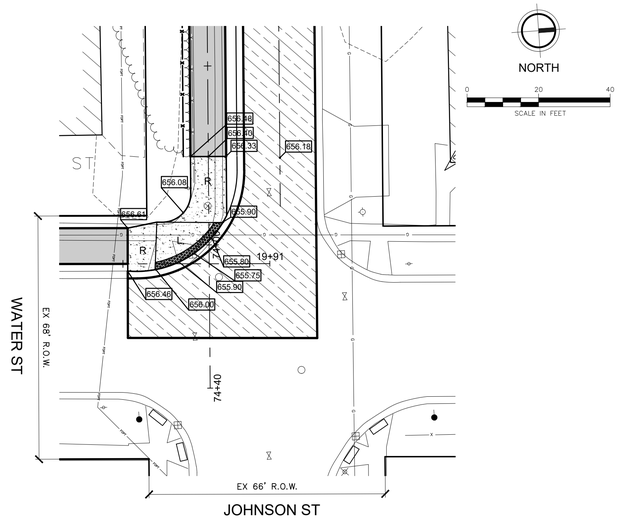
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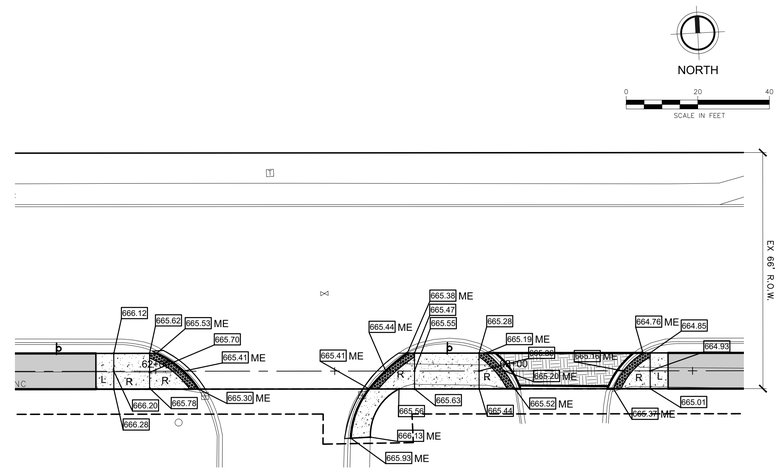
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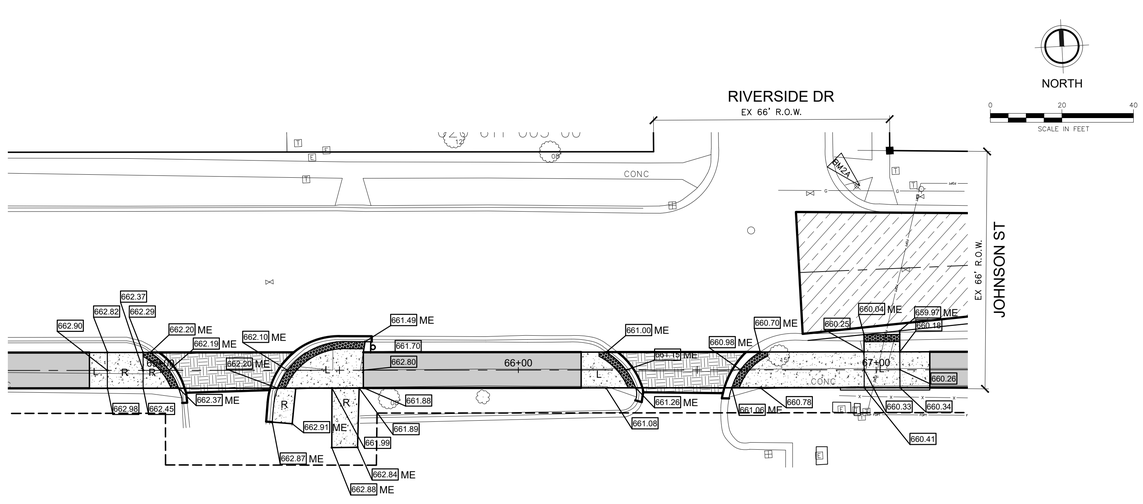
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M:\Proj\853001-855000\853030 Hart - Safe Routes to School 2021\Cad\Plan\853030_15.dwg - plotted on 5/28/2024 4:05 PM









LEGEND

	DETECTABLE WARNING SURFACE
620.50	SPOT ELEVATION
ME	MATCH EXISTING
L	LANDING
R	RAMP

NOTE: ALL RAMPS SHALL MEET MDOT SIDEWALK RAMP DETAILS R-28-J SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.
316 Morris Avenue, Suite 230
Muskegon, MI 49440
P: 231.726.1000
F: 231.726.2200

REVISION:

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL
RAMP DETAILS

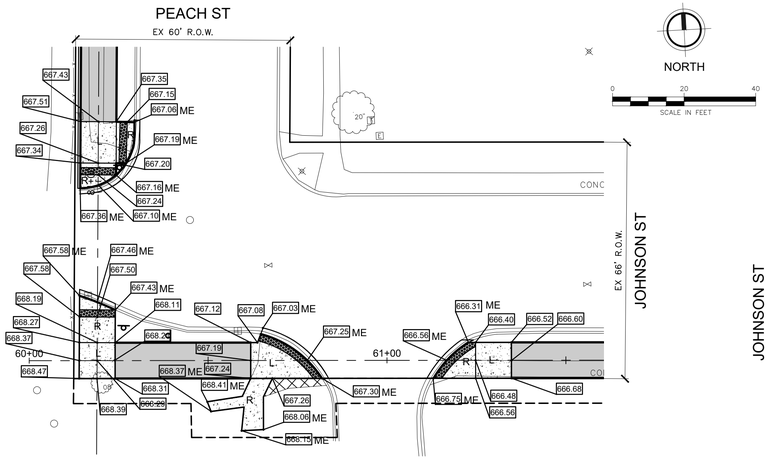
DESIGN TEAM:	PROJ MNGR:	LBH
	DESIGNED BY:	PMT
	DRAWN BY:	PMT
	CHECK BY:	

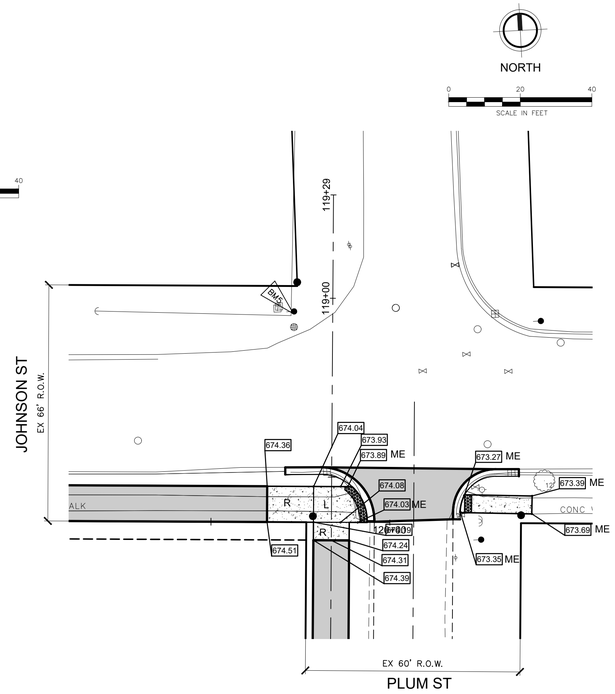
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853030_16
013123 petert

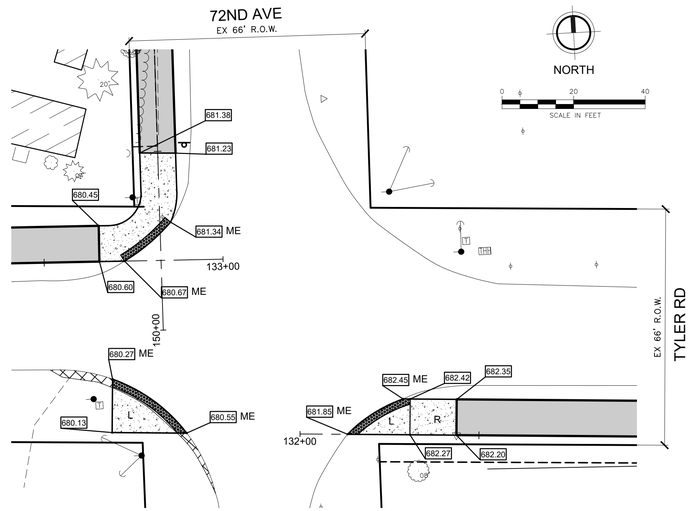
JUNE 2024

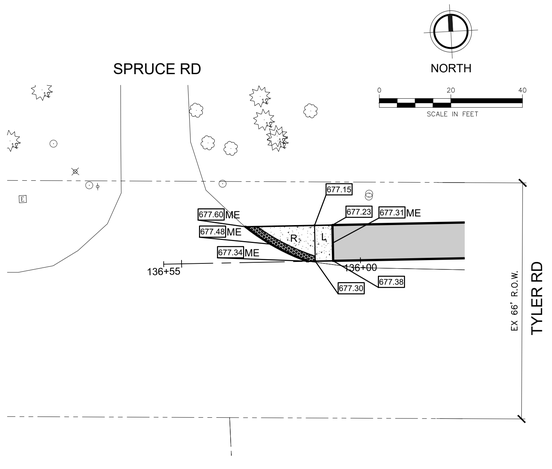
F&V PROJECT NO.
853030

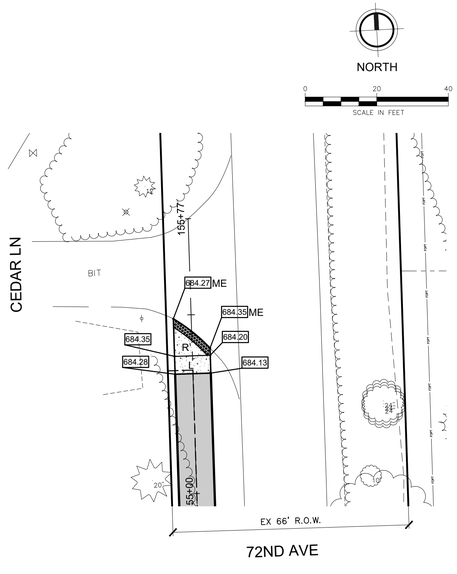
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LEGEND

- DETECTABLE WARNING SURFACE
- DIRECTION OF DRAINAGE
- 620.50 SPOT ELEVATION
- ME MATCH EXISTING
- L LANDING
- R RAMP

NOTE: ALL RAMPS SHALL MEET MDOT SIDEWALK RAMP DETAILS R-28-J SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.

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REVISION:

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OCEANA COUNTY
SAFE ROUTES TO SCHOOL
RAMP DETAILS

DESIGN TEAM:	PROJ MNGR: LBH DESIGNED BY: PMT DRAWN BY: PMT CHECK BY:

DRAWING INFORMATION:
853030_17
030724 petert

JUNE 2024

F&V PROJECT NO.
853030

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DETOUR ROUTE

LEGEND

- DETOUR ROUTE
- PROJECT LOCATION
- SIGN
- BARRICADE, TYPE III, HIGH INTENSITY, LIGHTED

MISCELLANEOUS QUANTITIES THIS SHEET

QUANTITY	UNIT	DESCRIPTION
100	EA	CHANNELIZING DEVICE, 42 INCH, FLUORESCENT, FURN
100	EA	CHANNELIZING DEVICE, 42 INCH, FLUORESCENT, OPER
2	EA	LIGHTED ARROW, TYPE C, FURN
2	EA	LIGHTED ARROW, TYPE C, OPER
4	EA	BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN
4	EA	BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, OPER
15	EA	PEDESTRIAN TYPE II BARRICADE, TEMP
315	SFT	SIGN, TYPE B, TEMP, PRISMATIC, FURN
315	SFT	SIGN, TYPE B, TEMP, PRISMATIC, OPER
60	SFT	SIGN, TYPE B, TEMP, PRISMATIC, SPEC, FURN
60	SFT	SIGN, TYPE B, TEMP, PRISMATIC, SPEC, OPER
1	LSUM	TRAF REGULATOR CONTROL
1	LSUM	MINOR TRAF DEVICES

CONSTRUCTION SIGNING (FOR INFORMATION ONLY)

SIGN	TYPE	SIZE	SIGN AREA (SFT)	NUMBER	TOTAL AREA (SFT)
1	TYPE III BARRICADE		NA	4	-
2	R11-2	48"x30"	10.0	2	20.0
3	W20-3	48"X48"	16.0	3	48.0
4	W20-2	48"x48"	16.0	3	48.0
5	M4-10R	48"x18"	6.0	1	6.0
6	M4-9L	30"x24"	5.0	2	10.0
7	M4-9R	30"x24"	5.0	2	10.0
8	M4-9	30"x24"	5.0	5	25.0
9	D3-1	36"x12"	3.0	18	54.0
10	M4-8a	24x12"	2.0	2	4.0
11	122-NFW-SHL-(R)	-	-	-	131.0
				TOTAL:	356.0

DETOUR SIGNAGE

1. BARRICADE, TYPE III, LIGHTED
2. ROAD CLOSED — R11-2 (48" x 30"), 10 Sft TYPE IIB SIGN, MOUNT ON SEPARATE POSTS ABOVE AND BEHIND BARRICADE
3. ROAD CLOSED AHEAD — W20-3 (48" x 48"), 16 Sft TYPE IIIB SIGN
4. DETOUR AHEAD — W20-2 (48" x 48"), 16 Sft TYPE IIIB SIGN
5. DETOUR — M4-10R (48"x18"), 6 Sft TYPE IIB SIGN
6. DETOUR — M4-9L (30" x 24"), 5 Sft TYPE IIIB SIGN
7. DETOUR — M4-9R (30" x 24"), 5 Sft TYPE IIIB SIGN
8. DETOUR — M4-9 (30" x 24"), 5 Sft TYPE IIIB SIGN
9. JOHNSON ST — D3-1 (36" x 12"), 3 Sft TYPE IIIB SIGN
10. DETOUR ENDS — M4-8a (24" x 12"), 2 Sft TYPE IIIB SIGN

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OCEANA COUNTY
SAFE ROUTES TO SCHOOL
DETOUR PLAN

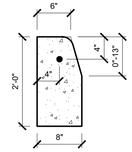
DESIGN TEAM: | PROJ MNGR: LBH | DESIGNED BY: PMT | DRAWN BY: PMT | CHECK BY:

DRAWING INFORMATION:
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031224 petert

JUNE 2024

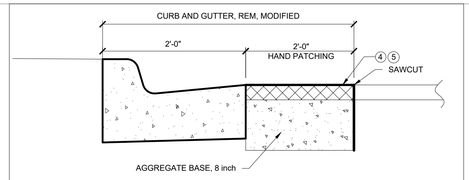
F&V PROJECT NO.
853030

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CURB, CONC, DET E4, MODIFIED

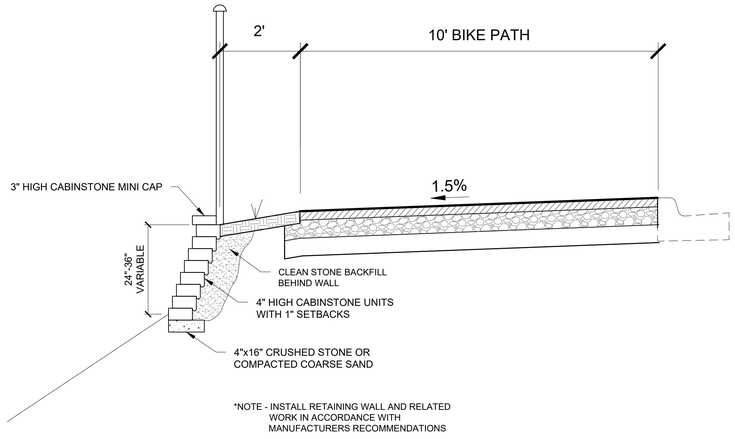
NOT TO SCALE



CURB AND GUTTER, REM, MODIFIED INCLUDES SAWCUTTING AND REMOVAL OF ENTIRE CURB AND GUTTER SECTION INCLUDING ADJACENT HMA SURFACE AND UNDERLYING CONCRETE AND/OR AGGREGATE BASE REGARDLESS OF THICKNESS AS SHOWN ON PLANS OR AS DIRECTED BY ENGINEER.

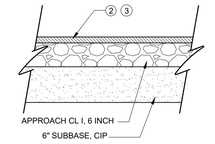
CURB AND GUTTER, REM, MODIFIED DETAIL

NOT TO SCALE



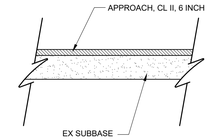
*NOTE - INSTALL RETAINING WALL AND RELATED WORK IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS

RETAINING WALL DETAIL



TYPICAL HMA APPROACH SECTION

NOT TO SCALE



TYPICAL GRAVEL DRIVE APPROACH SECTION

NOT TO SCALE

CONSTRUCTION NOTES

SOIL EROSION CONTROL MEASURES

TO PROTECT SLOPES AND DITCHES, SOD OR SEED / MULCH SHOULD BE PLACED AS SOON AS POSSIBLE. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE UTILIZED DURING CONSTRUCTION IN ACCORDANCE WITH THE MDOT STANDARD PLANS.

PLAN ELEVATIONS

ELEVATIONS SHOWN IN THESE PLANS ARE BASED ON USGS DATUM.

UNDERGROUND UTILITIES

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE WORKING DAYS EXCLUDING SATURDAYS, SUNDAYS & HOLIDAYS PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING THE UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM.

DRIVEWAYS

CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION WITH 22A AGGREGATE OR BITUMINOUS MILLINGS; INCLUDED IN MAINTENANCE GRAVEL, LM PAY ITEM.

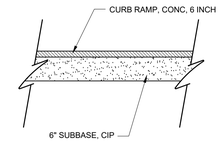
LAWN SPRINKLER SYSTEMS AND LANDSCAPING IN ROW

OWNERS OF EXISTING LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING SHALL BE NOTIFIED (IN WRITING WITH A COPY SENT TO THE ENGINEER) BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF ANY WORK TO BE DONE THAT WILL AFFECT THOSE SYSTEMS AND/OR LANDSCAPING. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LAWN SPRINKLER SYSTEM PRIOR TO THE CONTRACTOR BEGINNING WORK, AND IF THE CONTRACTOR CUTS THE SYSTEM DURING THE CONSTRUCTION, THE CONTRACTOR SHALL CAP THE SYSTEM PIPE AND WITNESS THE LOCATION OF THE CAP WITH A WOODEN STAKE FOR THE PROPERTY OWNERS USE. THE CONTRACTOR SHALL PLACE THE SALVAGED SPRINKLER HEADS ON THE PROPERTY OWNER'S PROPERTY. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LANDSCAPING PRIOR TO THE CONTRACTOR BEGINNING WORK, THE CONTRACTOR SHALL CAREFULLY SALVAGE THE LANDSCAPING ITEMS AND STOCKPILE THEM ON THE PROPERTY OWNER'S PROPERTY FOR THE PROPERTY OWNER. ANY OTHER MODIFICATION TO THE LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING, IS THE RESPONSIBILITY OF THE OWNER AND IS NOT PART OF THIS CONTRACT. THIS WORK IS INCLUDED IN OTHER ITEMS OF THE PROJECT.

MISCELLANEOUS QUANTITIES

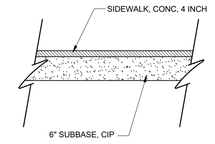
THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THIS PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS:

QUANTITY	UNIT	DESCRIPTION
1	LSUM	MOBILIZATION, MAX
100	FT	EROSION CONTROL, SILT FENCE
5	EA	POST, MAILBOX
125	CYD	MAINTENANCE GRAVEL, LM
6600	SYD	SURFACE RESTORATION
3300	SYD	MULCH BLANKET
3300	SYD	MULCH BLANKET, HIGH VELOCITY
100	CYD	SUBGRADE UNDERCUTTING, TYPE II



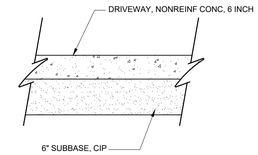
TYPICAL CONC RAMP, CONC, 6 INCH SECTION

NOT TO SCALE



TYPICAL SIDEWALK SECTION

NOT TO SCALE



TYPICAL CONCRETE DRIVEWAY SECTION

NOT TO SCALE

FLEIS&VANDENBRINK
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REVISION:

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL

NOTES & DETAILS

DESIGN TEAM: PROJ MNGR: LBH
DESIGNED BY: PMT
DRAWN BY: PMT
CHECK BY:

DRAWING INFORMATION:
853030_19
031224 petert

JUNE 2024

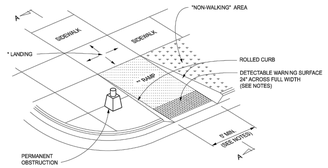
F&V PROJECT NO.
853030

19

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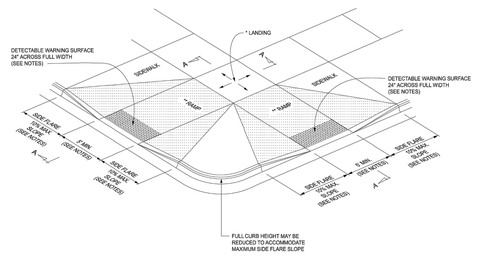
* MAXIMUM LANDING SLOPE IS 2.1% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.1%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE R

(ROLLED SIDES)



CURB RAMP TYPE F

(FLARED SIDES, TWO RAMPS SHOWN)

APPROVED BY: _____ DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: _____ DIRECTOR, BUREAU OF DEVELOPMENT

MDOT Michigan Department of Transportation

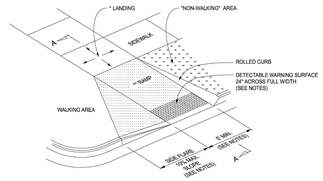
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 1 OF 7

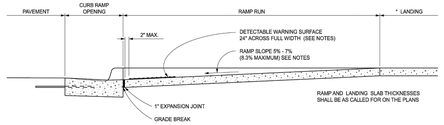
* MAXIMUM LANDING SLOPE IS 2.1% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.1%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE RF

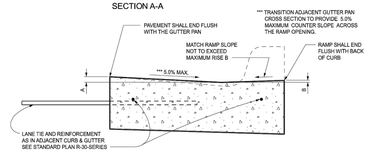
(ROLLED / FLARED SIDES)



SECTION A-A

CURB TYPE	MAXIMUM RISE (INCHES) A	B
B1	6	1
B2	7	1
B3	8	1
D1	6	1
D2	8	1
D3	9	1
C1	5	3
C2	7	3
C3	9	3
C4	8	3
C5	1	3
C6	1	3
F1	5	3
F2	7	3
F3	9	3
F4	8	3
F5	1	3
F6	1	3

FOR CURB TYPES SEE STANDARD PLAN R-30-SERIES



SECTION THROUGH CURB RAMP OPENING

(TYPICAL ALL RAMP TYPES)

MDOT Michigan Department of Transportation

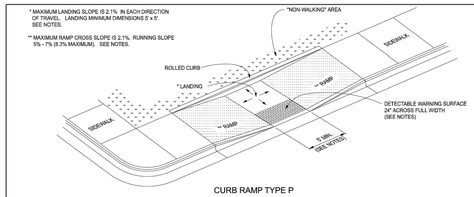
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 2 OF 7

* MAXIMUM LANDING SLOPE IS 2.1% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

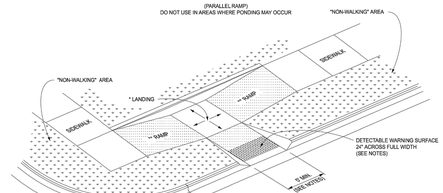
** MAXIMUM RAMP CROSS SLOPE IS 2.1%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



CURB RAMP TYPE P

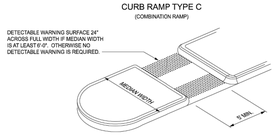
(PARALLEL RAMP)

DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



CURB RAMP TYPE C

(COMBINATION RAMP)



CURB RAMP TYPE M

(MEDIAN ISLAND)

MDOT Michigan Department of Transportation

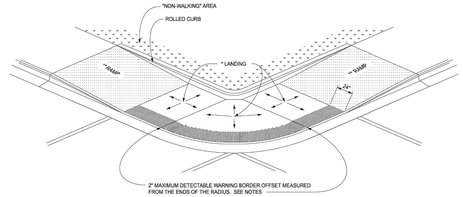
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

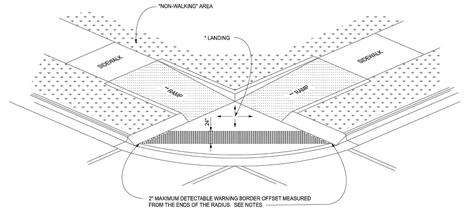
(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 3 OF 7

* MAXIMUM LANDING SLOPE IS 2.1% IN EACH DIRECTION OF TRAVEL. LANDING MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.1%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



(RADIAL DETECTABLE WARNING SHOWN)



(TANGENT DETECTABLE WARNING SHOWN)

CURB RAMP TYPE D

(DEPRESSED CORNER)

USE ONLY WHEN INDEPENDENT DIRECTIONAL RAMPS CAN NOT BE CONSTRUCTED FOR EACH CROSSING DIRECTION

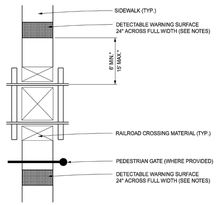
MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

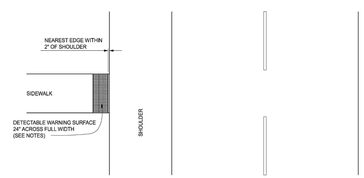
STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 4 OF 7

* THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE RAIL CROSSING IS 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. DO NOT PLACE DETECTABLE WARNING ON RAILROAD CROSSING MATERIAL.



DETECTABLE WARNING AT RAILROAD CROSSING



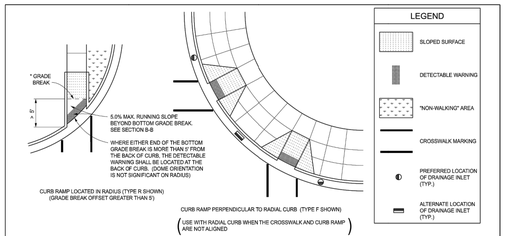
DETECTABLE WARNING AT FLUSH SHOULDER OR ROADWAY

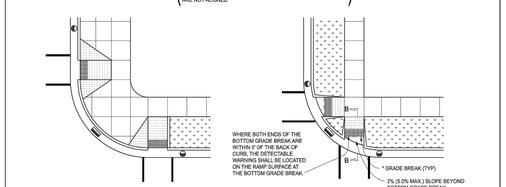
MDOT Michigan Department of Transportation

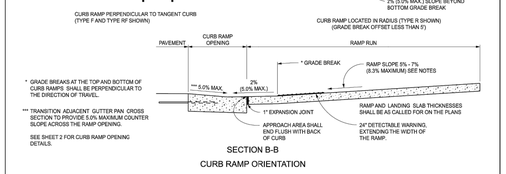
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 5 OF 7







* GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

*** TRANSITION ADJACENT GUTTER PAN CROSS SECTION TO PROVIDE 5.0% MAXIMUM COUNTER SLOPE ACROSS THE RAMP OPENING.

SEE SHEET 2 FOR CURB RAMP OPENING DETAILS.

SECTION B-B

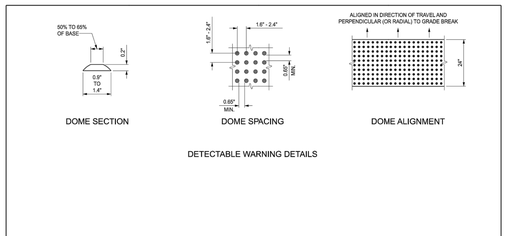
CURB RAMP ORIENTATION

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 6 OF 7



DOME SECTION | DOME SPACING | DOME ALIGNMENT

DETECTABLE WARNING DETAILS

NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, WHERE CONDITIONS PERMIT, IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE IN ONLY ONE DIRECTION, PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

WHEN 5' MINIMUM WIDTHS ARE NOT FEASIBLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'.

CURB RAMPS WITH A RUNNING SLOPE ≤ 5% DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GREATER THAN 2.1% PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

DETECTABLE WARNING SURFACE COVERAGE IS 24" MINIMUM IN THE DIRECTION OF RAMP/PATH TRAVEL AND THE FULL WIDTH OF THE RAMP/PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2" MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

FOR NEW ROADWAY CONSTRUCTION, THE RAMP CROSS SLOPE MAY NOT EXCEED 2.1%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSITIONED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.3% IS RELATIVE TO A FLAT (0%) REFERENCE. HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMPS TO EXCEED 15 FEET IN LENGTH NOT INCLUDING LANDINGS OR TRANSITIONS.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMPS. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN ½". ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO STOP TRAFFIC SHORT OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE ROADSIDE CURB LINE, SHALL BE PROVIDED WHERE AN UNOBSTRUCTED CIRCULATION PATH LATERALLY CROSSES THE CURB RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, UNPAVED SURFACE OR PERMANENT FIXED OBJECTS, WHERE THEY ARE NOT REQUIRED, FLARED SIDES CAN BE CONSIDERED IN ORDER TO AVOID SHARP CURB RETURNS AT RAMP OPENINGS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR
CURB RAMP AND
DETECTABLE WARNING DETAILS

(SPECIAL DETAIL) FHWA APPROVAL	11/08/2023 PLAN DATE	R-28-K	SHEET 7 OF 7

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

316 Morris Avenue, Suite 230
Muskegon, MI 49440
P: 231.726.1000
F: 231.726.2200

REVISION:

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL

SPECIAL DETAILS

DESIGN TEAM:	PROJ MNGR: LBH DESIGNED BY: PMT DRAWN BY: PMT CHECK BY:

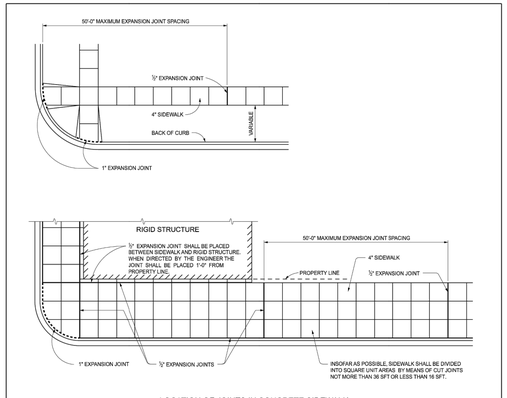
DRAWING INFORMATION:
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JUNE 2024

F&V PROJECT NO.
853030

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LOCATION OF JOINTS IN CONCRETE SIDEWALK

SIDEWALK INTERSECTIONS SHALL BE CAST MONOLITHICALLY WITH JOINT LINES PLACED AS NEAR TO PERPENDICULAR AS POSSIBLE WITH SIDEWALKS EDGE. TO AVOID NARROW OR POINTED PIECES OF CONCRETE.

WHERE A PERMANENT STRUCTURE IS LOCATED IN SIDEWALK, PLACE EXPANSION MATERIAL AROUND STRUCTURE, AND ADJUST JOINT PATTERN TO INTERSECT STRUCTURE AS ILLUSTRATED.

TYPICAL SIDEWALK JOINT LAYOUTS



4" CONCRETE SIDEWALK

APPROVED BY: _____ DIRECTOR, BUREAU OF FIELD SERVICES

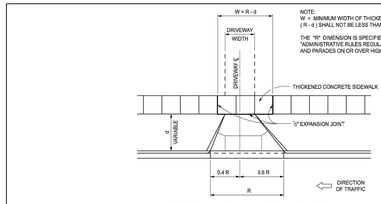
APPROVED BY: _____ DIRECTOR, BUREAU OF DEVELOPMENT

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

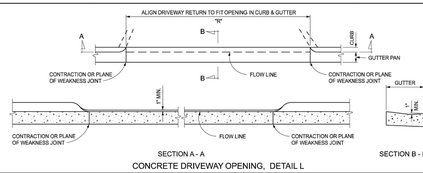
(SPECIAL DETAIL)	11/08/2023	R-29-J	SHEET: 1 OF 4
FHWA APPROVAL	PLAN DATE		



NOTE:
W = MINIMUM WIDTH OF THICKENED CONCRETE SIDEWALK. (R - d) SHALL NOT BE LESS THAN DRIVEWAY WIDTH.

THE "R" DIMENSION IS SPECIFIED IN THE PUBLICATION "ADMINISTRATIVE RULES REGULATING DRIVEWAYS, BANNERS AND PARADES ON OR OVER HIGHWAYS".

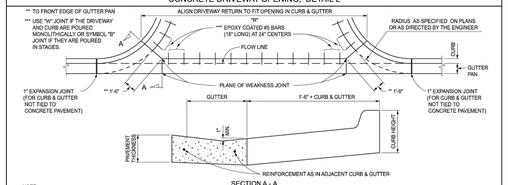
CONCRETE DRIVEWAY OPENING LAYOUT



SECTION A - A

SECTION B - B

CONCRETE DRIVEWAY OPENING, DETAIL L



SECTION A - A

CONCRETE DRIVEWAY OPENING, DETAIL M

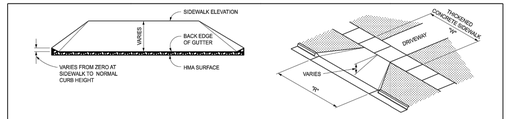
NOTE:
FOR ROADWAYS WITH CONCRETE PAVEMENTS, LONGITUDINAL LANE TIES WILL BE CONTINUOUS THROUGH THE DRIVEWAY OPENING AND THE SPACING OF THE #5 BARS IN CONCRETE DRIVEWAYS SHALL BE ADJUSTED TO AVOID CONFLICT WITH THE LONGITUDINAL LANE TIES.

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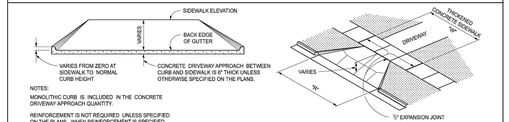
DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

(SPECIAL DETAIL)	12/08/2023	R-29-J	SHEET: 2 OF 4
FHWA APPROVAL	PLAN DATE		



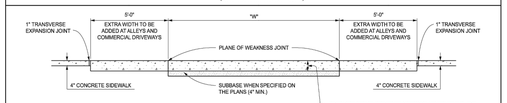
HMA DRIVEWAY APPROACH
(TO BE USED WITH DETAIL L)



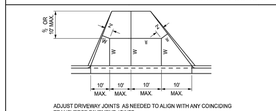
NOTES:
MONOLITHIC CURB IS INCLUDED IN THE CONCRETE DRIVEWAY APPROACH QUANTITY.

REINFORCEMENT IS NOT REQUIRED UNLESS SPECIFIED ON THE PLANS. WHEN REINFORCEMENT IS SPECIFIED, SEE CHART ON THIS SHEET.

CONCRETE DRIVEWAY APPROACH
(TO BE USED WITH DETAIL L OR M)



THICKENED CONCRETE SIDEWALK



ADJUST DRIVEWAY JOINTS AS NEEDED TO ALIGN WITH ANY COINCIDING TRANSVERSE PAVEMENT JOINTS.

JOINT LAYOUT IS AS INDICATED OR AS DIRECTED BY THE ENGINEER.

INTERMEDIATE DRIVEWAY JOINT DETAILS

REINFORCEMENT FOR CONCRETE DRIVEWAYS		
CONCRETE DRIVEWAY THICKNESS	WIRE SIZE (8" x 8" MESH)	AVERAGE WEIGHT (LBS/100 SFT)
LESS THAN 8"	W1.4	21
	W2.9	42
8" OR GREATER	USE WIRE FABRIC REINFORCEMENT SPECIFIED ON STANDARD PLAN R-31-SERIES	

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

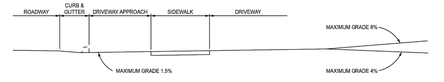
STANDARD PLAN FOR: DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

(SPECIAL DETAIL)	11/08/2023	R-29-J	SHEET: 3 OF 4
FHWA APPROVAL	PLAN DATE		



* SEE NOTES

LOW VOLUME COMMERCIAL OR RESIDENTIAL DRIVEWAY SLOPES



COMMERCIAL DRIVEWAY PROFILE FOR MAJOR TRAFFIC GENERATORS

NOTES:

FOR DRIVEWAY DESIGN REFER ALSO TO "ADMINISTRATIVE RULES REGULATING DRIVEWAYS, BANNERS, AND PARADES ON OR OVER HIGHWAYS" AND GEOMETRIC DESIGN G-680-SERIES, COMMERCIAL DRIVEWAYS.

FOR CURB AND GUTTER DETAILS, SEE STANDARD PLAN R-30-SERIES.

TRANSVERSE SIDEWALK SLOPES ARE 2.1% MAXIMUM. IN ORDER TO MEET SITE CONDITIONS, IF THE TRANSVERSE SLOPE IS REQUIRED TO BE LESS THAN 1.5%, LONGITUDINAL DRAINAGE MUST BE PROVIDED.

WHEN SETTING GRADES FOR COMMERCIAL DRIVES, THE TYPES OF VEHICLES USING THE DRIVE SHOULD BE CONSIDERED.

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

(SPECIAL DETAIL)	11/08/2023	R-29-J	SHEET: 4 OF 4
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MULCH BLANKET ON GUARDRAIL FILL SLOPE

DETAIL A

TYPICAL SLOPE AND DITCH PROTECTION

MULCH BLANKET SPILLWAY DITCH

* NOTE:
MULCH BLANKET SHALL BE USED ON BOTH SIDES OF NORMAL SECTIONS, HIGH SIDES OF ALL SUPERELEVATED SECTIONS, AND LOW SIDES OF PAVEMENTS HAVING A SUPERELEVATION OF 5% OR LESS. HIGH VELOCITY MULCH BLANKET SHALL BE USED ON THE LOW SIDE OF PAVEMENTS HAVING A RATE OF SUPERELEVATION GREATER THAN 5%.

APPROVED BY: _____ DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: _____ DIRECTOR, BUREAU OF DEVELOPMENT

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: SEEDING AND TREE PLANTING

(SPECIAL DETAIL)	12/08/2023	R-100-I	SHEET: 1 OF 4
FHWA APPROVAL	PLAN DATE		

BRACING - VERTICAL STAKES

BRACING DETAIL

BRACE DECIDUOUS TREES 2" TO 4" IN CALIPER OR 8' OR MORE IN HEIGHT WITH TWO STAKES.

BRACE DECIDUOUS TREES LESS THAN 2" IN CALIPER OR 8' IN HEIGHT WITH ONE STAKE ON THE WESTERLY SIDE OF THE PLANT.

TRIPOD GUYING DETAIL

GUY EVERGREENS OVER 4" IN CALIPER OR 9' IN HEIGHT WITH THE TRIPOD METHOD AND UNDER 9' IN HEIGHT WITH TWO STAKES.

SLOPE PLANTING

GUYING - TRIPOD METHOD

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: SEEDING AND TREE PLANTING

(SPECIAL DETAIL)	12/08/2023	R-100-I	SHEET: 2 OF 4
FHWA APPROVAL	PLAN DATE		

RAISED SHRUB BED DETAIL

SHRUB BED EDGING DETAIL

FIRST AND SECOND WATERING AND CULTIVATION SHALL INCLUDE SHRUB BEDS.

CUT 6" x 12" (MIN.) EDGING AROUND THE PERIMETER OF ALL SHRUB BEDS SHOWN ON THE PLANS. SPRAY A NON-PERSISTANT GLYPHOSATE HERBICIDE TO ENTIRE SHRUB BEDS PRIOR TO PLANTING AND BARK PLACEMENT.

SHRUB BEDS ARE TO BE PAID FOR BY THE PAY ITEM 'SITE PREPARATION'.

ALL PLANTS SHALL BE SET PLUMB AND HAVE THE BEST SIDE OF PLANT FACING THE MAIN VIEWING DIRECTION.

SHRUB BED DETAIL

MULTIPLE STEM TREES

PLANTING NOTES:

ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE - IMMEDIATELY.

LOOSEN SUBSOIL TO A DEPTH OF 4". LOOSEN EARTH ON SIDES OF PLANT POCKET TO BREAK ANY GLAZING CAUSED BY DIGGING.

FILL PREPARED SOIL TO ¾ THE DEPTH OF THE ROOT BALL, PACK FIRMLY, AND PUDDLE WITH WATER.

BACKFILL WITH PREPARED SOIL WHICH, AFTER COMPACTION, IS FLUSH WITH SURROUNDING GROUND LEVEL.

COVER ENTIRE PLANT POCKET AREA WITH 4" MULCH. PRUNE AND BRACE AND GUY.

WHEN PLANTS ARE FURNISHED IN CONTAINERS, CONTAINERS SHALL BE COMPLETELY REMOVED AT THE TIME OF PLANTING.

TREE HEIGHTS ARE SHOWN BEFORE PRUNING. TREE PLANTING DEPTHS ARE SHOWN AFTER SETTLING.

TREES AND SHRUBS SHALL NOT BE PLANTED WITHIN 50' AND 30' RESPECTIVELY OF THE NEAREST EDGE OF METAL - EXCEPT WHERE INACCESSIBLE TO VEHICLES.

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: SEEDING AND TREE PLANTING

(SPECIAL DETAIL)	12/08/2023	R-100-I	SHEET: 3 OF 4
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MEDIAN PLANTING
NOT TO SCALE

BARE ROOT PLANTS

PERENNIAL PLANTS

PLANTING BARE ROOT PLANT MATERIAL

REFER TO THE "SPECIAL PROVISIONS FOR BARE ROOT PLANTING" FOR SHIPPING, STORAGE AND HANDLING REQUIREMENTS.

MAINTAIN ROOT MOISTURE BY KEEPING ROOTS IMMERSED IN WATER PRIOR TO PLANTING.

ROOT PRUNE AS NECESSARY TO REMOVE ALL DAMAGED OR BROKEN ROOTS, AND AS REQUIRED BY THE DISTRICT FORESTER OR RESOURCE SPECIALIST.

DIG PLANTING HOLES AT LEAST 12" WIDE AND 12" DEEP TO ACCOMODATE ROOT MASS.

SET PLANTS PLUMB WITH THE ROOTS SPREAD PUT IN A NATURAL POSITION AT A DEPTH EQUAL TO THE DEPTH AT THE NURSERY.

HOLD PLANT FIRMLY AND PUDDLE (NOT TAMP) THE BACKFILL AROUND THE ROOTS WITH WATER. SUFFICIENT WATER SHALL BE USED TO ENSURE SATURATION OF THE BACKFILL, BUT CARE SHOULD BE TAKEN NOT TO OVERWATER, CAUSING A FLOATING SOIL MASS THAT PREVENTS COMPACTION AND MAY RESULT IN AIR POCKETS ADJACENT TO THE ROOTS. BACKFILL SHOULD BE FLUSH WITH THE GROUND AFTER COMPACTION.

COVER ENTIRE PLANT POCKET AREA WITH 4" MULCH AS SHOWN.

FIRST AND SECOND WATERING AND CULTIVATION SHALL INCLUDE PERENNIAL BEDS.

PERENNIALS ARE TO BE FULLY DEVELOPED TWO YEAR #2 CONTAINER PLANTS.

ENTIRE PERENNIAL BED SHALL BE EXCAVATED DOWN 12" AND REPLACED WITH 12" OF PREPARED SOIL.

PERENNIAL BEDS ARE TO BE PAID FOR BY THE PAY ITEM 'SITE PREPARATION'.

SEEDING NOTES:

THIS STANDARD ILLUSTRATES THE TYPICAL USE OF SEEDING WITH MULCH, AS THESE ITEMS RELATE TO ROADWAY CONSTRUCTION. THE ACTUAL DESIGN AND MATERIALS USED TO CONSTRUCT THE COMPLETE SECTION, WHICH INCLUDES SEEDING WITH MULCHING, WILL BE ACCORDING TO THE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

ITEMS CALLED FOR ON THIS STANDARD MAY ALSO BE USED DURING CONSTRUCTION AS AN EROSION CONTROL MEASURE. SEE STANDARD PLAN R-96-SERIES.

ALL DITCHES SHOULD HAVE HIGH VELOCITY MULCH BLANKET FOR EROSION CONTROL.

THE FIRST 8' BEHIND THE CURB OR SHOULDER IN URBAN MEDIAN AREAS WILL BE SEEDED, FERTILIZED, AND MULCHED WITH MULCH BLANKET. THE REMAINING AREAS WILL BE SEEDED, FERTILIZED, AND MULCHED WITH MULCH BLANKET OR STANDARD MULCH ANCHORED IN PLACE WITH A MULCH ADHESIVE OR WITH A MULCH NET.

ALL AREAS WHERE MULCH BLANKET IS CALLED FOR SHALL BE SEEDED, FERTILIZED, AND TOPSOILED AS SPECIFIED ON PLANS. NO MULCH OR ANCHORING MULCH IS REQUIRED WHERE MULCH BLANKET IS INSTALLED.

BACKSLOPE RESTORATION TREATMENT SHALL BE THE SAME AS THE FRONT SLOPE.

MDOT Michigan Department of Transportation

DEPARTMENT DIRECTOR: BRADLEY C. WIEFERICH, PE

STANDARD PLAN FOR: SEEDING AND TREE PLANTING

(SPECIAL DETAIL)	12/08/2023	R-100-I	SHEET: 4 OF 4
FHWA APPROVAL	PLAN DATE		

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316 Morris Avenue, Suite 230
Muskegon, MI 49440
P: 231.726.1000
F: 231.726.2200

REVISION:

CITY OF HART
OCEANA COUNTY
SAFE ROUTES TO SCHOOL

SPECIAL DETAILS

DESIGN TEAM:	PROJ MNGR: LBH
	DESIGNED BY: PMT
	DRAWN BY: PMT
	CHECK BY:

DRAWING INFORMATION:
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031224 petert

JUNE 2024

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853030

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City of Hart

Veterans Park Improvements

BID OPENING

BIDS DUE: Wednesday, August 7, 2024 at 3:00 p.m.

Bidder	Bid Amount	Comments
1. Anlaan Corporation	1,186,311.35	
2. Nexgen Construction		
3. Visscher Construction & Restoration		
4. Hallack Contracting	1,199,444.06	
5. McCormick Sand, Inc.		
6. Walton Contracting	1,282,301.00	
7.		

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