



**ACME TOWNSHIP PARKS & TRAILS MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
June 17th, 2016 10:00 a.m.**

ROLL CALL:

Committee:

| | | | | | | | |
|---|----------|---|---------|---|-----------|---|--------|
| A | Demarsh | A | Feringa | X | Hefner | X | Jenema |
| A | LaPointe | X | Timmins | A | Wentzloff | | |
| A | Heinert | X | Kushman | | | | |
| A | Henkel | X | Winter | | | | |

Advisory:

Staff:

A. PUBLIC COMMENT: None

- Tom was informed that the park and trails committee will request his attendance when there are issues the committee needs his input on, so that he can concentrate on his summer duties.
- There was no quorum so no motions will be made today.

B. APPROVAL OF AGENDA: No quorum

C. INQUIRY AS TO CONFLICTS OF INTEREST:

D. CORRESPONDENCE:

E. ACTION:

1. Approve Draft Minutes of:

- a. Parks & Trail Meeting Minutes 05/24/2016-** moved to the next meeting.

F. REPORTS (if applicable)

1. Township Board – Jenema- no report

2. TART – Kushman-

- discussed how the monetary break down of trail maintenance cost will be done in different levels so that communities can see a full break down of yearly vs. long term cost and maintenance. Discussed a few different models used by communities to fund trail maintenance costs. He is waiting on Klaus to break down the trail distance so that he can put it into the matrix to generate cost per foot.
- County Road Commission had a meeting with TART to discuss the rail road crossing at 5 mile and how to best mark it so people will cross the right way in order to avoid accidents.

3. Universal Accessibility – Timmins – no report

4. Staff – Winter

- The board agreed to submit the 2% grant to the GTB, that Jean Aukerman and Barb Heflin wrote.
- DNR visit was on 6/15 at Bayside park. The preliminary scores will be out at the end of August
- Discussed what would be turned into the DNR in October.
- Discussed the best options for re purposing picnic tables and benches if we get the grants.
- The need to move the signs and life rings to a more appropriate spots within the park. Amy will pass the request on to the maintenance committee.

G. NEW BUSINESS:

1. Bayside Park Design Detailing Discussion

Basic design elements-

- committee members present agreed that it should be timeless and classic.
- Went over different design elements and discussed pros and cons.
- Bike trail along Mt. Hope Rd. is approximately 6.5% grade. Switch backs would have

MEETING NOTES – QUORUM NOT PRESENT

to be used in order to make it ADA compliant. No one thought we should move forward spending money on a trail that couldn't be ADA compliant and that the road should be used until a proper ADA compliant trail can be established with a willing land owner.

H. OLD BUSINESS:

1. Inner Acme Connector Trail Update-

- Connections are still being explored on the best way to connect to Lautner Rd.

I. PUBLIC COMMENT - none

ADJOURN:



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6042 Acme Road, Williamsburg MI 49690
June 17th, 2016 10:00 a.m.**

ROLL CALL:

Committee:

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| | Demarsh | | Feringa | | Hefner | | Jenema |
| | LaPointe | | Timmins | | Wentzloff | | |
| | Heinert | | Kushman | | | | |
| | Henkel | | Winter | | | | |

Advisory:

Staff:

- A. PUBLIC COMMENT:**
- B. APPROVAL OF AGENDA:**
- C. INQUIRY AS TO CONFLICTS OF INTEREST:**
- D. CORRESPONDENCE:**
- E. ACTION:**
 - 1. Approve Draft Minutes of:**
 - a. Parks & Trail Meeting Minutes 05/24/2016**
- F. REPORTS (if applicable)**
 - 1. Township Board - Jenema
 - 2. TART - Kushman
 - 3. Universal Accessibility – Timmins
 - 4. Staff – Winter
- G. NEW BUSINESS:**
 - 1. Bayside Park Design Detailing
- H. OLD BUSINESS:**
 - 1. Inner Acme Connector Trail Update
- I. PUBLIC COMMENT**

ADJOURN:



**ACME TOWNSHIP PARKS & TRAILS MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
May 24th, 2016 9:00 a.m.**

ROLL CALL:

Committee:

| | | | | | | | |
|----------|-----------------|----------|----------------|----------|------------------|----------|---------------|
| A | Demarsh | x | Feringa | x | Hefner | x | Jenema |
| x | LaPointe | x | Timmins | x | Wentzloff | | |
| x | Heinert | x | Kushman | x | McDonough | | |
| x | Henkel | x | Winter | | | | |

Advisory:

Staff:

A. PUBLIC COMMENT:

B. APPROVAL OF AGENDA: Look up who made the motion

1. Motion by Jenema, second by LaPointe to approve the agenda with the addition of email correspondence from Brian Kelley dated May 24, 2016. Motion Carries.

C. INQUIRY AS TO CONFLICTS OF INTEREST: None

D. CORRESPONDENCE:

1. Email from Brian Kelley dated May 24, 2016 – read into record.
2. Email from Trustee Jean Aukerman dated May 10, 2016- read into the record.

E. ACTION:

1. **Approve Draft Minutes of:**
 - a. **Parks & Trail Meeting Minutes 04/14/2016** – Motion: LaPointe, 2nd Timmins to approve draft minutes of 04/14/16. Motion carries.

F. REPORTS (if applicable)

1. Township Board – Jenema

- Discussion related to CZM and 2% Grants. Jenema concerned because we have a lot of money tied up for potential grant matches that have been applied for.
- Not going after CZM grant since it requires a match. 2% Grant does not require a grant. Feringa confirmed applying for a 2% Grant for the parks will not jeopardize other 2% Grant application submitted in the Township. June 30th 2% grant deadline.
- Decision to apply for a 2% Grant not to exceed \$40,000 with the intention of providing site amenities from the final design that will compliment Phase I construction: site lighting, site furniture, appropriate/compliant signage, restroom renovations, with the option to request amending the 2% Grant application to address landscaping and other needs if the Township does not receive the Trust Fund Grant. Motion by Jenema, second by Wentzloff.
- Motion by Jenema, 2nd, by Lapointe, Motion to put the Bayside Park Phase I project out for bid. Motion carries.
- Park and trails by laws were modified from the PC by laws. Jenema read the bylaws and will present them at the June board meeting.

2. TART – Kushman

- Three areas that Tart has been concentrating on 1) inter connection design 2) Lautner Rd. through the VGT properties to Acme. 3) Tc to Charlevoix

- Forming an Acme trail group, the first meeting is Tuesday May 31st.
- 3. **Grand Traverse Regional Land Conservancy – McDonough**
 - Matt McDonough has taken a new job with Munson.
- 4. **Universal Accessibility – Timmins,**
 - Spoke with the Disability Network, reported back the places in Bay Side Park that needed to be brought up to new standards. Klaus said many of the changes would be made during upgrades to the site.
- 5. **Autumn Olive – Winter**
 - Ruffed Grouse Society is scheduled to come August 1st to cut the autumn olive. Trees will begin to be tagged in July, to identify trees that the township wants to keep. The Land Conservancy is helping with the trees, volunteers are welcome.

G. NEW BUSINESS:

1. Acme Township Trail Update-

- Klaus went over the different designs through the park. Heffner asked about getting copies of the plan to start showing the public. Winter would like to put the plan ideas in the new Kiosk at Bayside Park. Discussed the trail head parking on Bunker Hill. It was agreed that Julie Clark would do some inquiring about close properties that may provide additional parking. Brought up the idea of moving the trail through Bayside Park farther away from the road behind the black willow.
- Discussed Mt. Hope Rd. and what would be needed to make the trail ADA compliant, ie. land acquisition to provide areas to create cut outs. Discussed width of trails and how it relates to the sidewalks already on M72, and the new form based code.

2. Bayside Park Design and Development (Phase I).

- Not discussed

H. OLD BUSINESS:

1. Mission and Vision Statements

- **Acme Township** will provide a diverse, safe and accessible system of Parks, Trails, and Natural Areas that connect people with the environment and beauty of Acme Township. A system that offers residents and visitors notable recreational experiences while balancing natural resource protection. Motion by Jenema to approve the vision statement; 2nd by Heffner. Motion carries

I. PUBLIC COMMENT none

ADJOURN: Feringa made a motion to adjourn, 2nd. By Timmins

1. RENOVATE EXISTING BUILDINGS



Outdoor Tubular
Bottle Filling Station

Wall Mount Fountain



Model LK4405BF is shown.



Existing restroom building

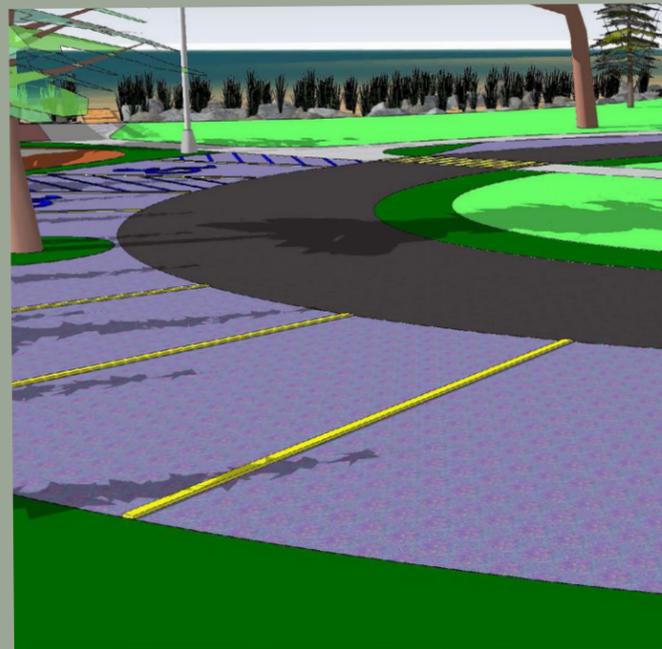
- Bathroom partitions, epoxy coat floor,
- Add high energy hand dryers, plumbing
- Paint wall ceiling surfaces, Upgrade ADA
- Replace roof (standing seam metal or synthetic shingle)
- Create vestibule detail or trellice
- Add ADA drinking fountain
- Add ADA code signage
- Replace facade area light
- Add seating (wait) area
-

Renovate former cottage building

- Material face-lifts to match RR
- Use 'Natural Element' materials
Lick & stick stone, shakes, timber, metals
- Improve walkway connections



2. UPGRADE / DEVELOP PARKING



Parking Lot C and Parterre Gardens



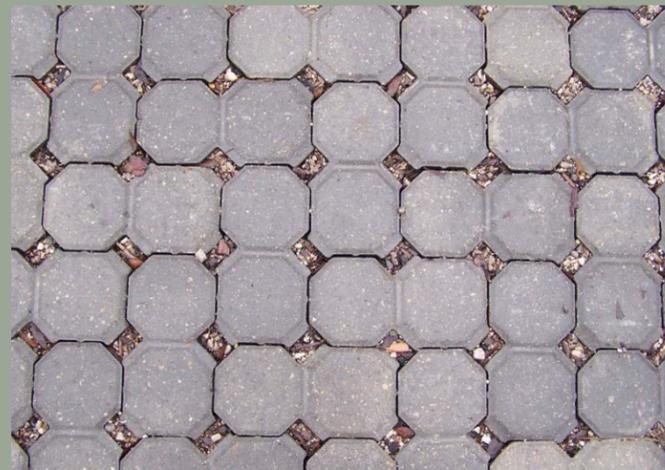
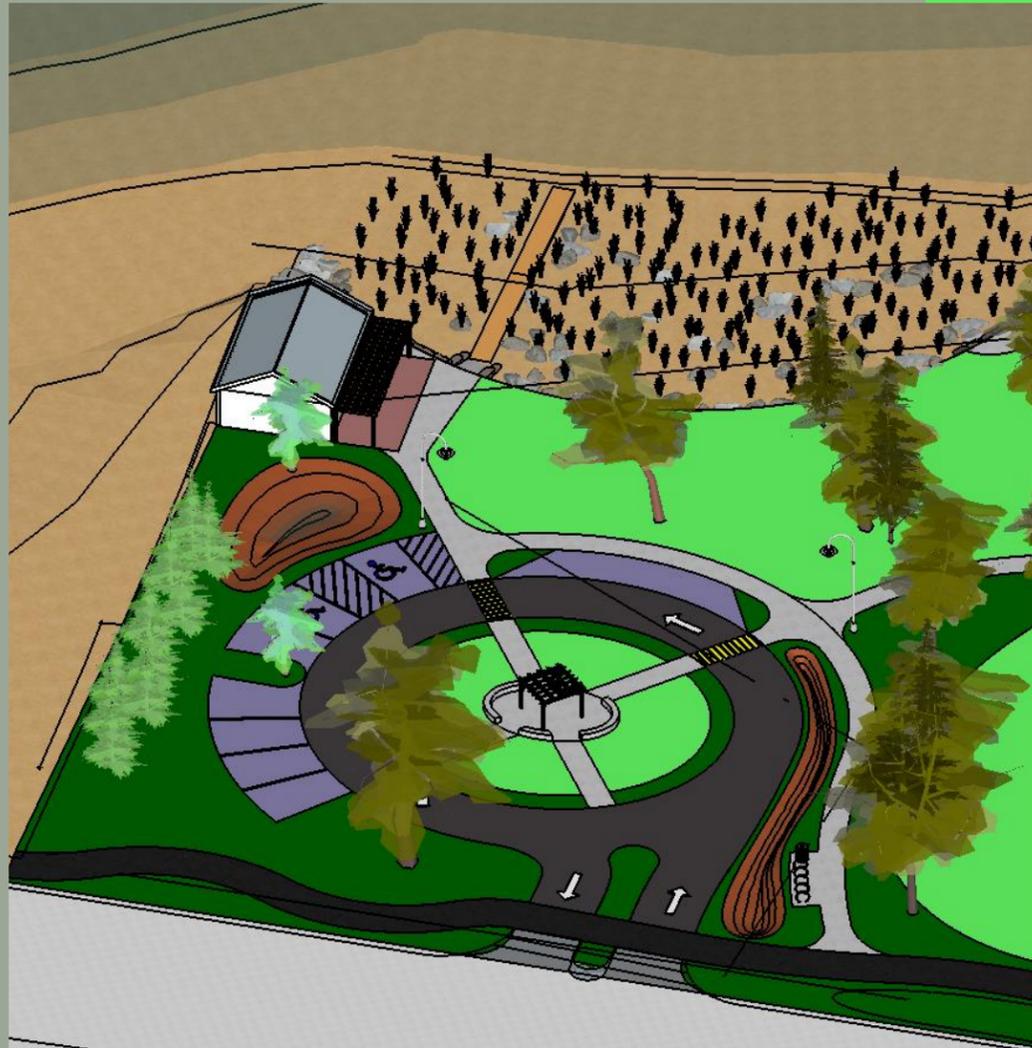
EXISTING PARKING

- Re-route one-way loop with angle parking
- Provide more UA reserved spaces
- Eliminate left-out turns on US-31
- Stormwater bioswales and LID measures
- New park entrance signs near road ROW's

NEW PARKING LOOP

- Consider large vehicle spaces (x3) with porous pavement
- One-way loop with Connecting walkways
- New exit drive to Shore Beach Lane (at signaled intersection US-31)





3. UA PLAY STRUCTURES

- Place contextual play pieces
- Meet Consumer Product Safety Standards (CPSS)
- UA play surfacing under structures
- Beach Swings (in sand with UA connector)
- Develop 1-5 Tot play area/pieces
- Define play areas from surrounding park
- Relate to beach and shelter areas
- Consider new types of climbers (cable, rocks)
- Seek funding through MDNR Passport
- Consider proximity (distance) to Restrooms



VITRITURE[®]
POURED IN PLACE SURFACING SYSTEMS



Gosling Czubak
engineering sciences, inc.

4. DEVELOP COVERED SHADE AREAS

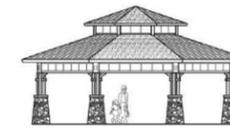


LARGE OPEN-AIR PAVILION

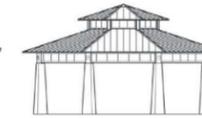
- Locate in south-central area of new parcels
- Consider permanent structure
- Provide access to parking/drop-off
- Utilize wood/steel/stone
- Synthetic shake shingles
- Tongue & groove ceiling / reflective lighting
- Multi-sided with views to water and use spaces
- Layout for with (100%) UA table arrangement
- Develop attached ADA Group Grills

Craftsman Octagons

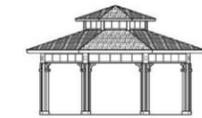
The Craftsman Octagons are shown as double tier shelters, but they can be designed as single or triple tiered shelters as well. Sizes available are between 16' and 72'. Shown are models 22 through 50. The roof pitch is 4/12.



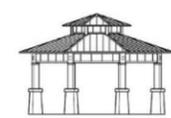
CT38



CT34



CT30



CT26



CT22



SMALL SHADE STRUCTURES

- Locate near open beach areas
- Consider fabric shade structures
- Provide access from walkways
- Utilize powdercoated steel
- Provide UA seating and/or table

Enviroshake®
Quality Engineered Roofing

Enviroshake v

About Us

Enviroshake® and Enviroshingle® are both composite roof



Enviroshake® Profiles





Sustainable By Design
 SkyWays™ and CoolToppers® fabric

Landscape Structures shade products fabric is a high-density polyethylene. Designed to block up to 99% of ultraviolet rays, making it a long-lasting, great-looking fabric. The fabric is made of all corners with 16-ounce non-tear vinyl and all tubing enters or exits. Engineered for super durability.



Standard Steel Roof Colors

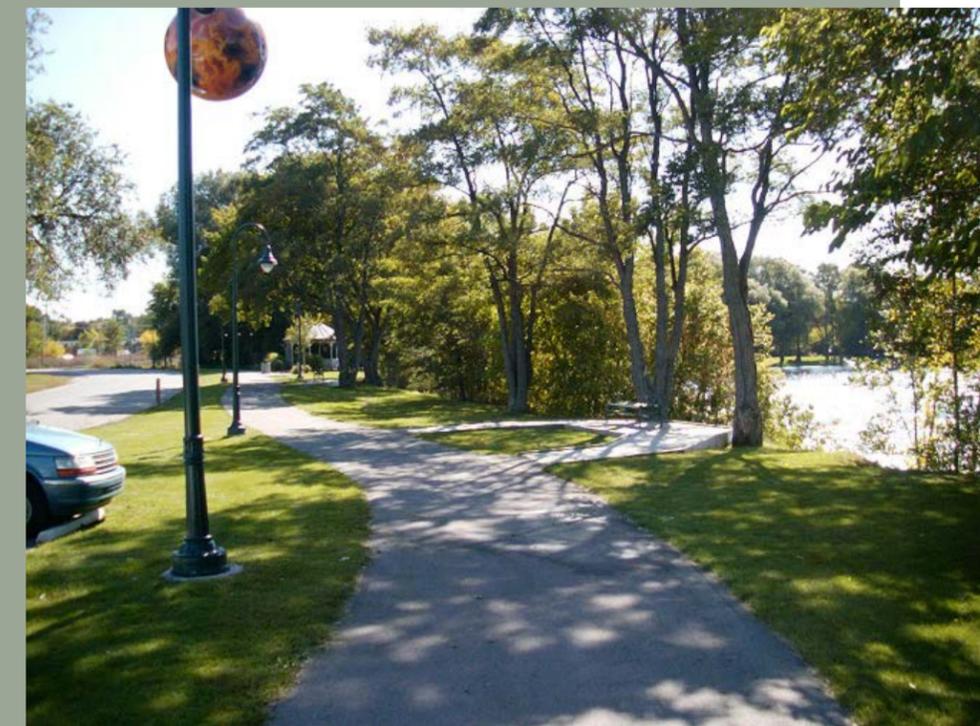
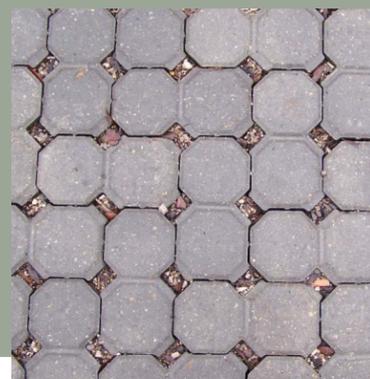
Kynar 500 coated roof panels with 24 gauge Galvalume® substrate



5. DEVELOP UA SITE WALKWAYS



- Rebuild failing bituminous path (original parcel)
- Create connectors to north parcel walks/spaces
- Make sidewalk connections to TART and N&S
- Create wide non-motorized promenade (10' TART Connector)
- Provide crosswalks at drive throats
- Build Info kiosk at walkway/TART intersection
- Implement Universal Access width (6' walks)
- Formal and informal walkway routing
- Develop widened main promenade (Ph. 1)
- Introduce detail natural flagstone paver pattern
-



ROSETTA

GRAND FLAGSTONE

FEATURES

- Beautiful natural stone texture.
- 15 unique shapes replicate large, irregular flagstone.
- Fast installation with easy-to-install pattern.
- Uniform thickness (1.75") = comfortable end result.
- High strength concrete = long term durability.
- Multiple natural color blends available.

GRAND FLAGSTONE PACKAGING

Note: Outside dimensions of each layer are identical to all other layers, allowing any layer to be used anywhere in the pattern.

- 1 pallet = 90 s.f. (assumes 3/8" joint)
- 8 layers per pallet
- 2,160 lbs. per pallet
- Each pallet contains 2ea of the following layers:

LAYER 1

LAYER 2

LAYER 3

LAYER 4

TYPICAL PATTERN: Each layer is comprised of multiple individual pieces.

PATIO LAYOUT

WALKWAY LAYOUT

OPTIONAL
Trim edges for
smooth lines

www.discoverrosetta.com

6. RECREATIONAL & SITE AMENITIES

- Timber light poles with LED fixtures
- Powder coated metal bike parking areas
- Interpretive map or informational panels
- Concrete pads at free picnic table/bench placements
- UA drinking fountain
- UA footwash location(s)
- UA Grouped Grills
- Redevelop Park Entry Signs
- PVC and metal benches & tables



Square Wood Light Poles

TimberWood light poles are laminated for strength and beauty, then pressure treated for durability. A wiring channel is strategically placed toward the center of the pole. While generally referred to as "square" poles, our lamination process does not facilitate exact square dimensions. For example, our 5" square poles measure 4 1/2" x 5 1/8" for pole heights from 10 to 20 feet above the groundline. Our 25' pole (height above ground) measures 5 1/8" x 6" with those dimensions increasing depending upon the length of the pole and the strength needed for loading. We do however, offer a true square model with 8" x 8" dimensions.

TimberWood light poles are available for both base-mounted applications as well as for direct burial. For base-mounted applications, our standard pole models range from 8' to 25' in length utilizing a steel base. Direct burial models provide heights ranging from 10' to 25' above the groundline as shown in the following table. For further detail, please download the PDF drawings found under **Downloadable TimberWood Information** to help determine the model that best suits your project.

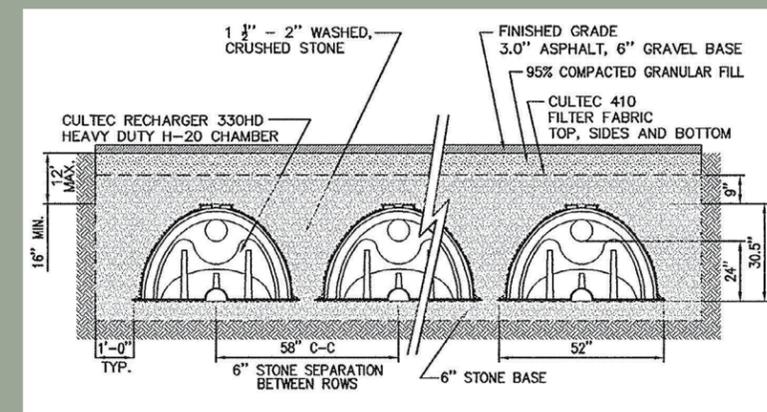
TimberWood crossarms are also available in one way (2'9" to 4'9" lengths) and two way models (4' to 8' lengths).



7. SOLVE STORM WATER ISSUES



- Locate bioswales at natural springs locations
- Parking lot collection and dispersion
- Implement permeable pavers (non snow plowed areas)
- Implement bi-swale buffers near river
- Utilize native plants areas for absorption
- Aerate grass areas for better infiltration
- Create “out-of-bounds” no-mow meadow areas
- Use Low Impact Development (LID) techniques



10. INTERPRET NATURE & HISTORY



- Create central park celebration / event
- Work with TWC on water quality sign placement
- Redvelop interpretive signage
- Create seatable lawn area and native plantings
- Remove invasive aquatics along central shore
- Obtain MDEQ beach grooming (pod #2)
- Create overlooks at beach nodes
- Develop consistent signage standards
- Utilize for marketing the waterfront



9. DEVELOP KAYAK / CANOE LAUNCH



- Develop universal access launch (at Bunker Hill)
- Use marine grade materials
- Utilize existing small boat launch location
- Develop staging and drop zone along Parking
- Install interpretive panel about water-trail
- Promote group / family kayaking “tours”
- Seek MDNR Trust Fund grant funds



Layout Notes

1. ALL SIGNS AND SIGN PLACEMENT, WHERE APPLICABLE, WILL BE IN COMPLIANCE WITH THE MICHIGAN MANUAL OF UNIFIED TRAFFIC CONTROL DEVICES.
2. THE CONTRACTOR WILL SUPPLY THE NECESSARY SIGNS, SIGNALS, LIGHTING DEVICES, MARKINGS, BARRICADES, CHANNELING, AND HAND SIGNAL DEVICES TO PROPERLY SIGN THE JOB PERMITTED. THE CONTRACTOR WILL PROVIDE DESIGN, APPLICATION, INSTALLATION, AND MAINTENANCE OF VARIOUS TRAFFIC CONTROL DEVICES REQUIRED FOR ROAD OR STREET CONSTRUCTION AS OUTLINED BY THE ECR PERMITS.
3. A NORTH-SOUTH AND EAST-WEST CONTROL LINE SHALL BE STAKED BY GOSLING CZUBAK ENGINEERING SCIENCES, INC PRIOR TO CONSTRUCTION. REMAINING STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. DIMENSIONS ARE TO EDGE OF CONCRETE, ASPHALT, OR GRAVEL.

Surfacing Symbol Legend

- CONCRETE PAVING
- ASPHALT PAVING
- PAVERS
- UNI ECO-STONE CONCRETE PAVERS
- BEACH SAND
- ADA BOARDWALK
- CRUSHED LIMESTONE

General Legend

- PROJECT LIMITS
- EDGE OF WATER
- EX EDGE OF GRAVEL
- EX EDGE OF CONCRETE
- EX OVERHEAD ELECTRIC
- EX CONCRETE CURB
- EX WOOD BOLLARD
- EX CONIFEROUS TREE
- EX DECIDUOUS TREE
- PROPOSED EDGE OF ASPHALT/CONCRETE
- PROPOSED EDGE OF GRAVEL
- PROPOSED BOLLARD / WOOD POST
- PROPOSED RAILING
- PROPOSED RIP-RAP / ROCK SPILLWAY
- PROPOSED LIGHT
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SLEEVE
- PROPOSED WALL
- PROPOSED STONE BOULDER

EDGE OF WATER ELEV.=580.3
RECORDED ON 05/06/2016



OVERALL PLAN
SCALE: 1" = 20'



SCALE 1" = 20'
0' 20' 40'

Removals Notes

1. REMOVE ALL TREES INCLUDING CUTTING STUMP OR GRINDING 12" MIN BELOW FINISHED GRADE AS INDICATED ON PLANS.
2. PROTECT ALL TREES AND SHRUBS NOT SCHEDULED FOR REMOVAL AS INDICATED ON PLANS. DO NOT OPERATE EQUIPMENT, STORE, STOCKPILE, OR PARK WITHIN DRIPLINE (DIAMETER OF CANOPY) OF TREES TO MINIMIZE SOIL COMPACTION AND PROTECT ROOT ZONE OF TREE. PROVIDE SILT FENCE BARRIER AROUND DRIP LINE OF TREE WHERE INDICATED ON PLANS. HOLD NECESSARY DISTURBANCE TO A MINIMUM.
3. CONTRACTOR TO PROVIDE FINAL LOCATION OF STOCKPILE, MATERIAL AND MACHINERY STAGING AREAS AND GET APPROVAL FROM LANDSCAPE ARCHITECT AND OWNER PRIOR TO COMMENCING WORK ON-SITE. CONTRACTOR WILL ENSURE ADEQUATE EROSION CONTROL MEASURES NOT LIMITED TO SILT FENCE INSTALLATION.
4. DO NOT OPERATE HEAVY MACHINERY BELOW SHORELINE.
5. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR DAMAGE TO ITEMS NOT SCHEDULED FOR REMOVAL.
6. CONTRACTOR TO USE DISCRETION FOR RE-USE OF AGGREGATE BASE MATERIAL. IF CONTRACTOR DECIDES TO RE-USE CRUSHED ASPHALT OR EXCAVATED BASE AGGREGATE IN PLACE OF NEW BASE MATERIAL, INSTALLATION WILL BE COMPLETED IN ACCORDANCE WITH PLANS, DETAILS, AND SPECIFICATIONS. BASE MATERIAL WILL MEET OR EXCEED ALL TESTING REQUIREMENTS AS INDICATED IN SECTION 025110F OF THE CONSTRUCTION SPECIFICATIONS.
7. TOP SOIL AND RESEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. REFER TO PLANS FOR SPECIAL AREAS TO RECEIVE NATIVE SEED MIXES OR NO-MOW FESCUES.
8. REMOVAL ITEMS SHOWN ARE BASED ON BEST AVAILABLE INFORMATION AND ARE SHOWN SCHEMATICALLY. THE CONTRACTOR SHALL WALK THE SITE PRIOR TO BID TO BECOME FAMILIAR WITH THE EXTENT OF REMOVAL ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REMOVALS NECESSARY TO COMPLETE CONSTRUCTION. QUESTIONS REGARDING ITEMS TO BE REMOVED SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT.
9. TOPOGRAPHIC INFORMATION FOR SITE PROVIDED BY FERGUSON & CHAMBERLAIN ASSOCIATES, INC. SUPPLEMENTARY TOPOGRAPHIC INFORMATION PROVIDED BY GOSLING CZUBAK ENGINEERING SCIENCES, INC.
10. PRIOR TO CONSTRUCTION, REMOVE AND SALVAGE ALL ITEMS AS INDICATED ON PLANS.
11. STRIP AND STOCKPILE TOPSOIL FOR ALL IRRIGATED LAWN AREAS AS CALLED FOR ON THE PLANS. DO NOT STRIP TOPSOIL FROM AREAS TO BE RESTORED WITH NATIVE SEED EXCEPT IF DISTURBED BY EARTHWORK OR FOR NEW RETENTION AREAS AS INDICATED ON THE PLANS.
12. SOIL CONTAMINATION EXISTS ON THIS SITE. GEO-PROBES AND SOIL BORINGS WERE CONDUCTED BY MACKINAC ENVIRONMENTAL TECHNOLOGY, INC. DO NOT OVER EXCAVATE GRADES BELOW WHAT IS INDICATED ON THE PLANS WITHOUT AUTHORIZATION FROM LANDSCAPE ARCHITECT.

Removals Legend

- REMOVE EXISTING CONCRETE
- CRUSH AND SHAPE EX ASPHALT
- REMOVE EX GRAVEL
- DREDGE EX SAND
- REMOVE MISC (AS NOTED ON REMOVAL PLANS)
- SAVE AND PROTECT EXISTING TREES
- SAVE AND PROTECT EXISTING TREES, INSTALL TEMPORARY PROTECTIVE FENCING AROUND DRIPLINE PERIMETER OF TREE
- REMOVE EXISTING TREE
- REMOVE EXISTING VEGETATION AS APPROVED BY LANDSCAPE ARCHITECT
- GP-1 TH#2 SOIL BORING LOCATION (SEE SPECIFICATIONS APPENDICES)



THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT 1 (800) 482-7171 OR 811 THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

Gosling Czubak
Engineering Sciences, Inc.
12000 Corporate Blvd
Farmington Hills, MI 48334
Tel: 248-869-9900
Fax: 248-869-1600

By: _____
Revision: _____
Date: _____
No: _____

Drawn By: NTS
Checked By: KDH
Date: 04-07-2016
Scale: 1"=20'

Location:
6042 Acme Road
Williamstown, MI
49690

LAYOUT PLAN
NORTH BAYSIDE PARK
ACME TOWNSHIP

Project No.
2015390007.01

Sheet
1
of 4

Grading Legend

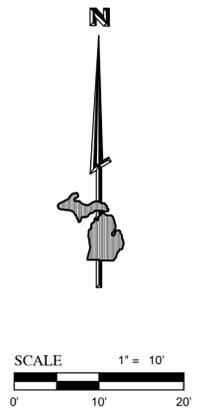
- HP HIGH POINT
- LP LOW POINT
- TW TOP OF WALL
- BW TOP OF WALL
- TS TOP OF STAIR
- BS BOTTOM OF STAIR
- TD TOP OF DECK
- 576 EXISTING CONTOUR
- 584 PROPOSED CONTOUR
- 583.96 PROPOSED SPOT GRADE
- 5% DIRECTION OF SLOPE
- 2% PROPOSED DRAINAGE DIRECTION & GRADIENT
- PROPOSED SURFACE WATER DRAINAGE DIRECTION
- PROPOSED CULVERT W/ END SECTIONS
- GRADE BREAK
- SR-1 SLOW RELEASE STRUCTURE

Surfacing Symbol Legend

- CONCRETE PAVING
- ASPHALT PAVING
- PAVERS
- UNI ECO-STONE CONCRETE PAVERS
- BEACH SAND
- ADA BOARDWALK
- CRUSHED LIMESTONE

General Legend

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- PROPOSED BOLLARD / WOOD POST
- PROPOSED RAILING
- PROPOSED RIP-RAP / ROCK SPILLWAY
- PROPOSED LIGHT
- 576 EXISTING CONTOUR
- 584 PROPOSED CONTOUR
- PROPOSED SLEEVE
- PROPOSED WALL
- PROPOSED STONE BOULDER



GRADING ENLARGEMENT
SCALE: 1" = 10'



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Engineers
Surveyors
Environmental
Scientists
Architects

Gosling Czubak
engineering sciences, inc.
12000 Corporate Center
Farmington Hills, MI 48334
248-869-9101 800-988-1082
Fax 248-869-9202

G

By: _____

Revision: _____

No.: _____

Date: _____

Drawn By: NTS

Checked By: KDH

Date: 04-07-2016

Scale: 1" = 10'

Location:
6042 Acme Road
Williamstown, MI
49680

BEACH WALL ENLARGEMENT
NORTH BAYSIDE PARK
ACME TOWNSHIP

Project No.
2015390007.01

Sheet
2
of 4

Grading Legend

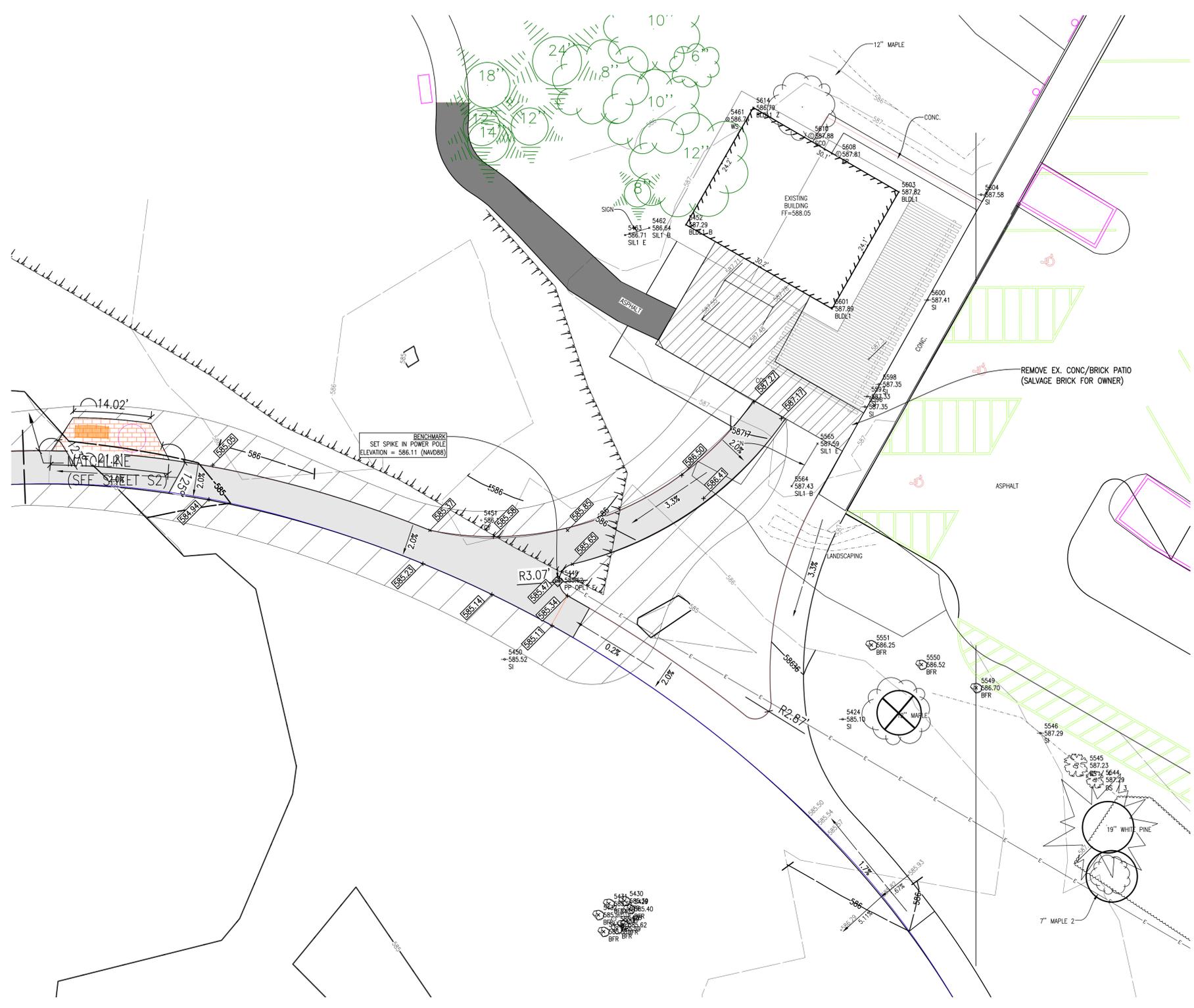
- HP HIGH POINT
- LP LOW POINT
- TW TOP OF WALL
- BW TOP OF WALL
- TS TOP OF STAIR
- BS BOTTOM OF STAIR
- TD TOP OF DECK
- 576 EXISTING CONTOUR
- 584 PROPOSED CONTOUR
- 583.96 PROPOSED SPOT GRADE
- 5% DIRECTION OF SLOPE
- PROPERTY LINE
- 2% PROPOSED DRAINAGE DIRECTION & GRADIENT
- PROPOSED SURFACE WATER DRAINAGE DIRECTION
- PROPOSED CULVERT W/ END SECTIONS
- GRADE BREAK
- SR-1 SLOW RELEASE STRUCTURE

Surfacing Symbol Legend

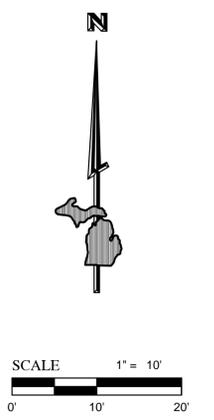
- CONCRETE PAVING
- ASPHALT PAVING
- PAVERS
- UNI ECO-STONE CONCRETE PAVERS
- BEACH SAND
- ADA BOARDWALK
- CRUSHED LIMESTONE

General Legend

- PROJECT LIMITS
- EDGE OF WATER
- EX EDGE OF GRAVEL
- EX EDGE OF CONCRETE
- EX OVERHEAD ELECTRIC
- EX CONCRETE CURB
- EX WOOD BOLLARD
- EX CONIFEROUS TREE
- EX DECIDUOUS TREE
- PROPOSED EDGE OF ASPHALT/CONCRETE
- PROPOSED EDGE OF GRAVEL
- PROPOSED BOLLARD / WOOD POST
- PROPOSED RAILING
- PROPOSED RIP-RAP / ROCK SPILLWAY
- PROPOSED LIGHT
- 576 EXISTING CONTOUR
- 584 PROPOSED CONTOUR
- PROPOSED SLEEVE
- PROPOSED WALL
- PROPOSED STONE BOULDER



GRADING ENLARGEMENT
SCALE: 1" = 10'



Gosling Czubak
Engineering Sciences, Inc.
12000 E. Grand Ave. Suite 200
Troy, MI 48068-1002
Tel: 313-948-9101 Fax: 313-948-9102

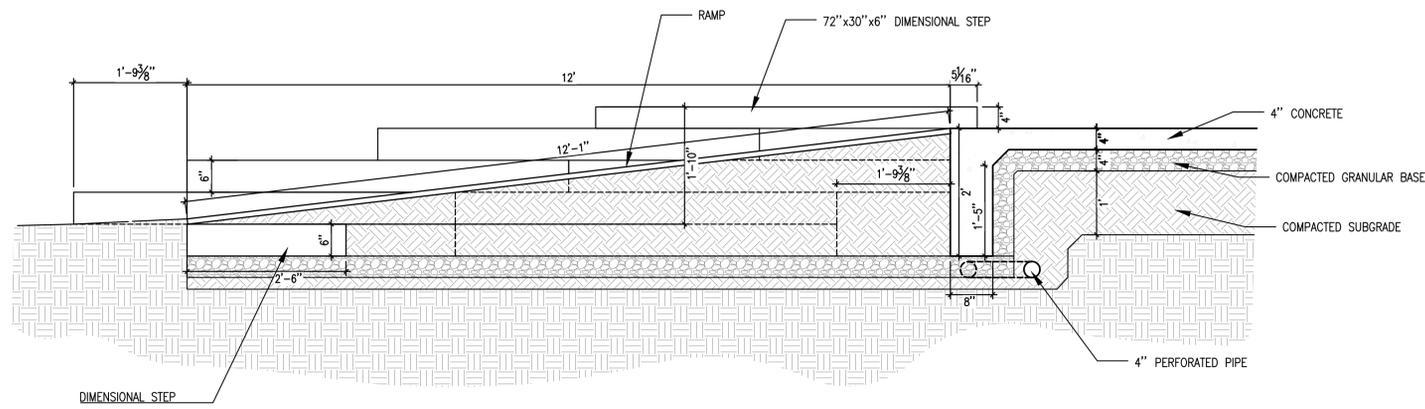
| | |
|-------------|------------|
| By: | |
| Revision: | |
| Date: | |
| No.: | |
| Drawn By: | NTS |
| Checked By: | KDH |
| Date: | 04-07-2016 |
| Scale: | 1" = 10' |

Location:
6042 Acme Road
Williamstown, MI
49680

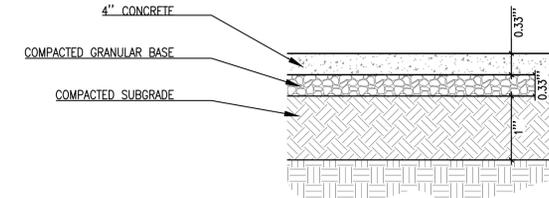
PARKING LOT B ENLARGEMENT NORTH BAYSIDE PARK ACME TOWNSHIP

811 Know what's below.
Call before you dig.

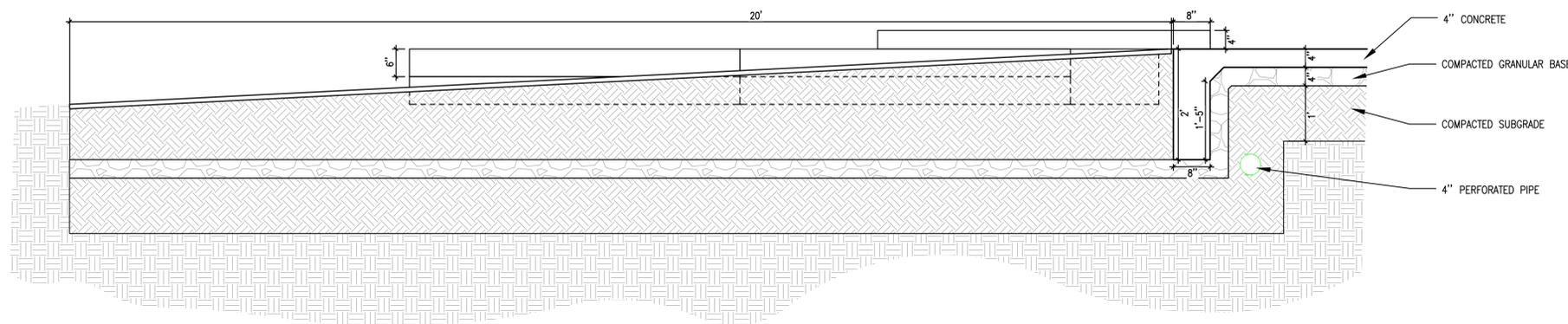
THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT 1 (800) 482-7171 OR 811 THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.



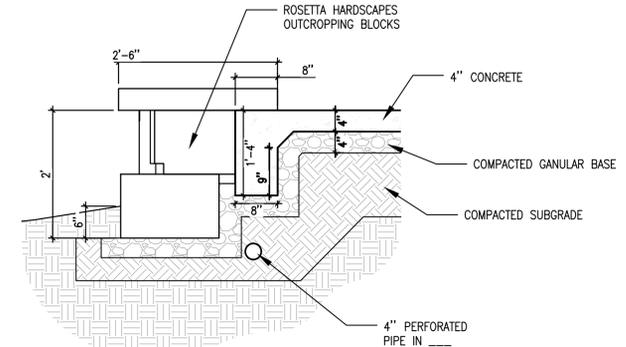
B - RAMP SECTION
SCALE: 1/2" = 1'



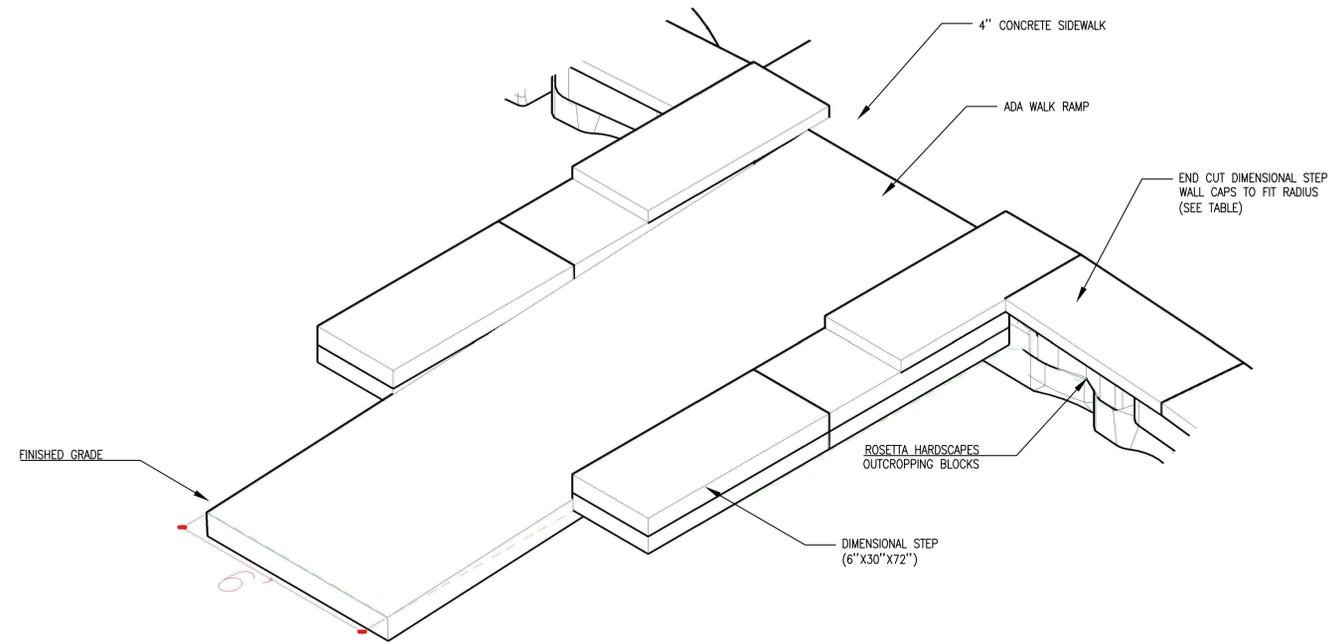
SIDEWALK SECTION
SCALE: 1/2" = 1'



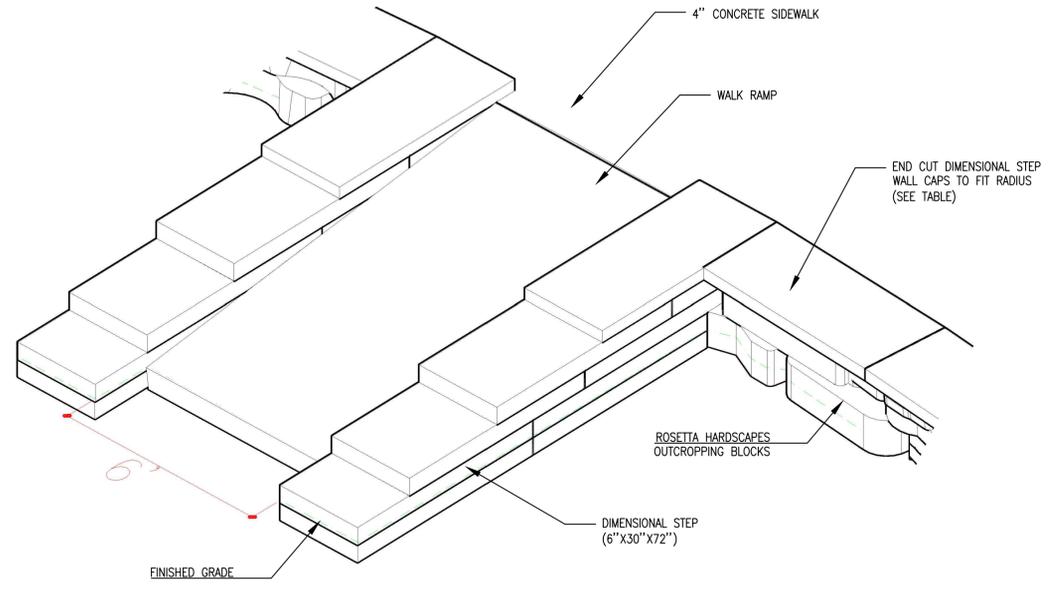
ADA RAMP SECTION
SCALE: 1/2" = 1'



A - BEACH WALL SECTION
SCALE: 1/2" = 1'



ADA RAMP ISOMETRIC
SCALE: 1" = 10'



RAMP ISOMETRIC
SCALE: 1" = 10'