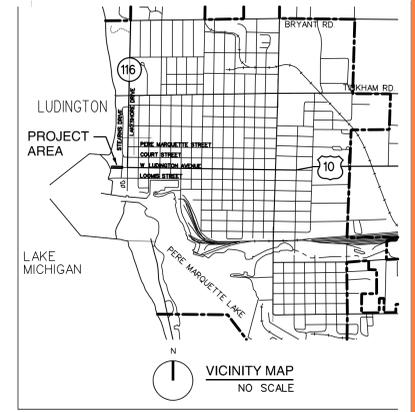


W. LUDINGTON AVENUE AND STEARNS PARK IMPROVEMENTS PHASE 1

CITY OF LUDINGTON

LUDINGTON, MICHIGAN



DRAWING INDEX

T	TITLE SHEET
C100	TOPOGRAPHIC SURVEY BY LAKESHORE LAND SURVEYING
C100A	TOPOGRAPHIC SURVEY BY LAKESHORE LAND SURVEYING
C101	DEMOLITION PLAN AND LAYOUT PLAN
C102	GRADING AND UTILITY PLAN AND SESC PLAN
C103	SITE DETAILS
L101	LANDSCAPE PLAN
E101	ELECTRICAL PLAN

UTILITIES

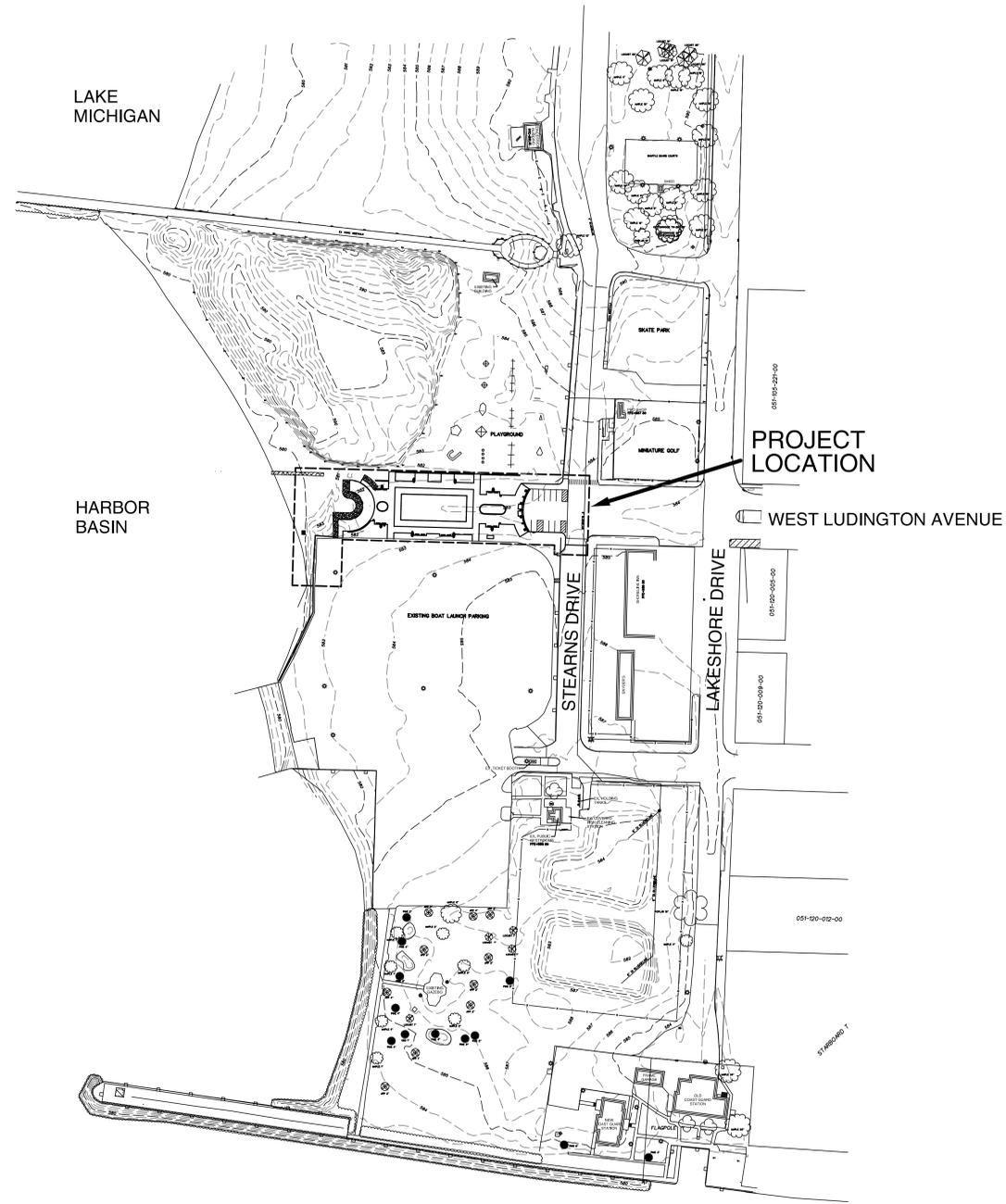
SANITARY SEWER, STORM SEWER, WATER
 CITY OF LUDINGTON
 UTILITY MAINTENANCE DEPARTMENT
 SUPT. DARRYL PLAMONDON
 231 690 4679

ELECTRIC
 CONSUMERS ENERGY
 KEVIN HEALY
 231 480 2009

TELEPHONE
 FRONTIER

CABLE
 CHARTER COMMUNICATIONS (SPECTRUM)

NATURAL GAS
 DTE ENERGY

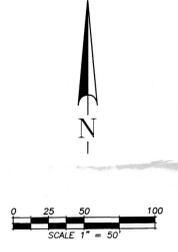
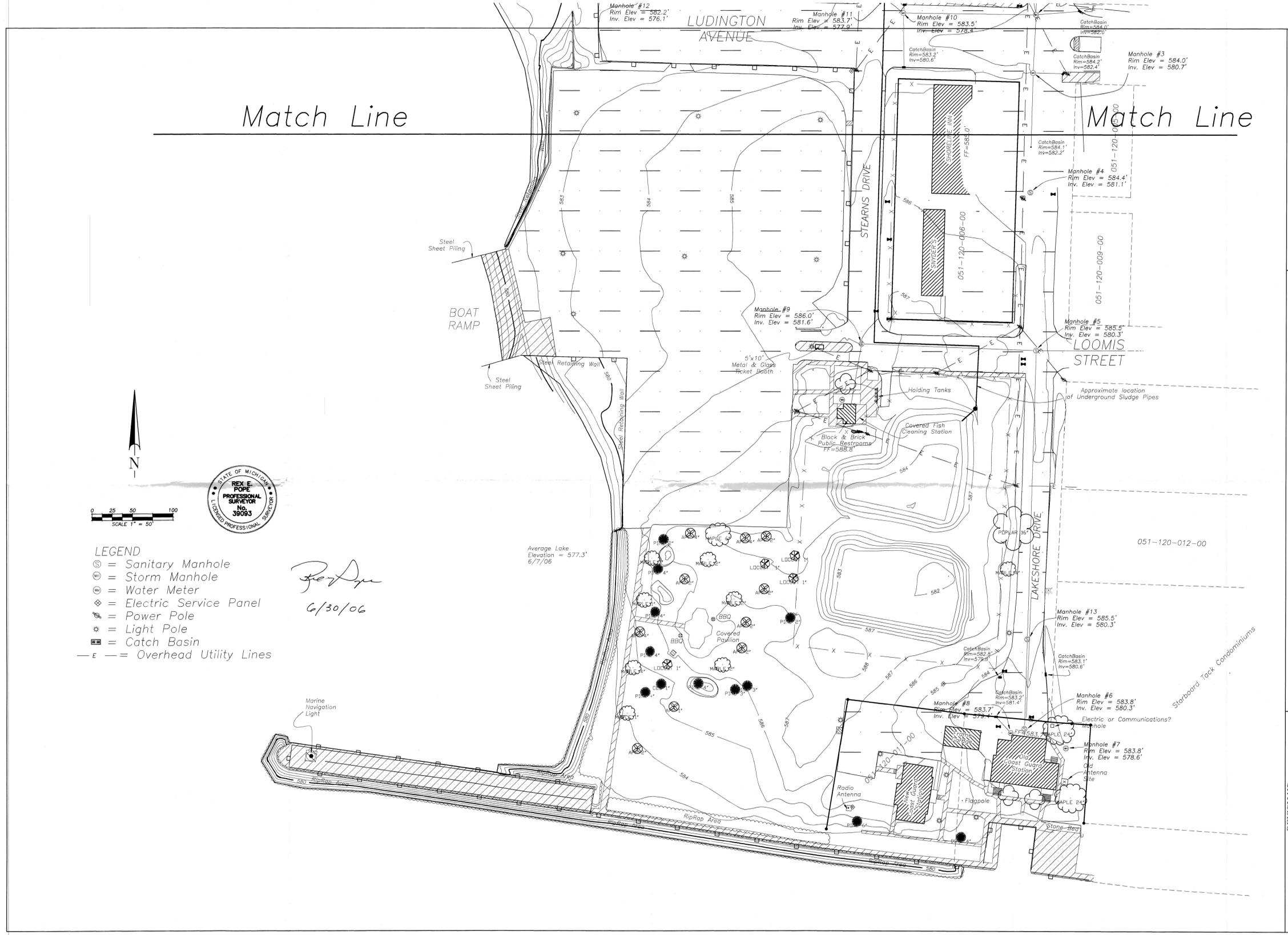


OVERALL SITE PLAN

1"=100'

0 100'

7/20/08 8:52:24 PM
 P:\0600045\DWG\0600045.dwg
 THIS DOCUMENT HAS BEEN PREPARED BY PROGRESSIVE AE AS AN INSTRUMENT OF SERVICE AND PROGRESSIVE AE SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN.



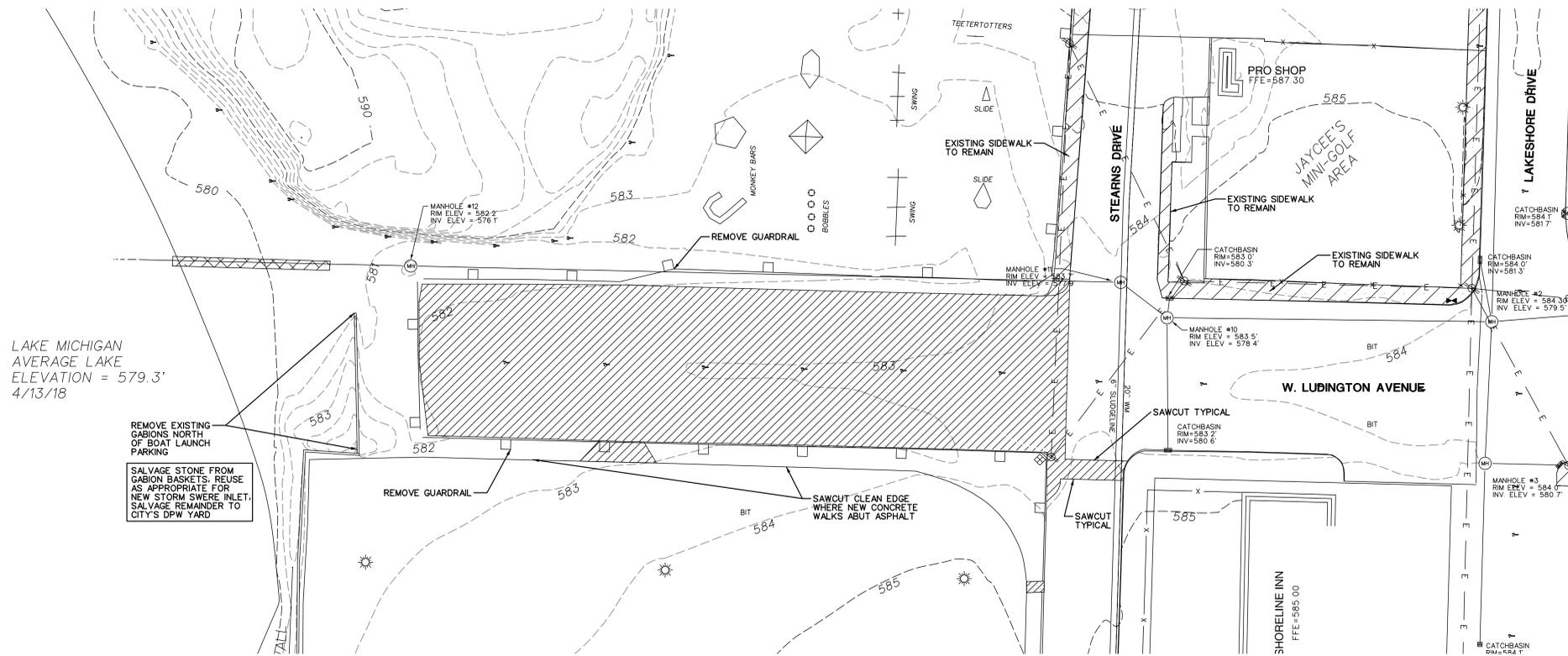
- LEGEND**
- ⊙ = Sanitary Manhole
 - ⊙ = Storm Manhole
 - ⊙ = Water Meter
 - ⊙ = Electric Service Panel
 - ⊙ = Power Pole
 - ⊙ = Light Pole
 - ⊙ = Catch Basin
 - E — = Overhead Utility Lines

Red Dye
 6/30/06

Average Lake
 Elevation = 577.3'
 6/7/06

LAKESHORE LAND SURVEYING 6008 Bryant Road Ludington, Mich. 49431 Ph. (231) 843-8225 Fax (231) 843-9056		Client: City of Ludington
		Job No.: 060045
Drawn By: REP	Checked By: JMP	Page 1 of 2
Drawing No.: Sheet2	Date: 6/1/06	

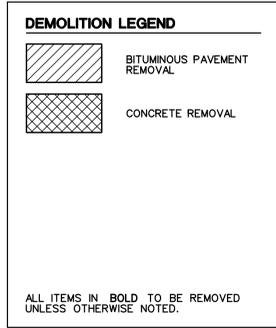
NO.	DATE	DESCRIPTION	BY



LAKE MICHIGAN
AVERAGE LAKE
ELEVATION = 579.3'
4/13/18

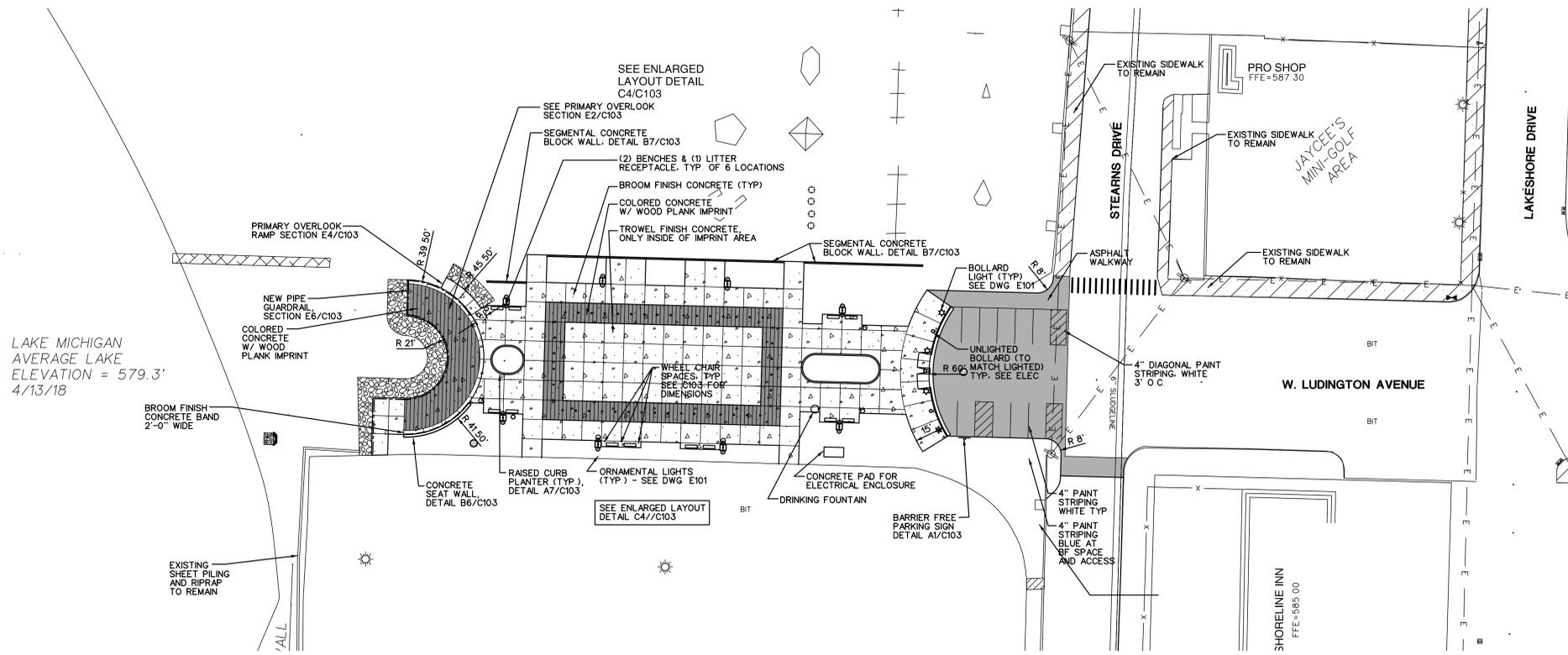
REMOVE EXISTING
GABIONS NORTH
OF BOAT LAUNCH
PARKING

SALVAGE STONE FROM
GABION BASKETS. REUSE
AS APPROPRIATE FOR
NEW STORM SWIRE INLET.
SALVAGE REMAINDER TO
CITY'S DPW YARD



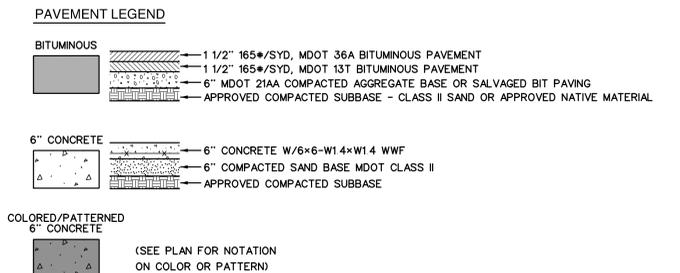
- GENERAL NOTES:**
- EXISTING STREET SIGNS, AND CONCRETE BUMPER BLOCKS TO BE SALVAGED AND TURNED OVER TO THE CITY
 - PROVIDE ACCESS TO MINI-GOLF AND SKATE PARK DURING CONSTRUCTION
 - ANY AREA DISTURBED BY CONSTRUCTION TO BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN BEFORE CONSTRUCTION BEGAN - PATCH PAVEMENT IN-KIND IF REQUIRED
 - SAWCUT FULL DEPTH ALL EDGES OF PAVEMENT TO BE REMOVED
 - CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE DEMOLITION AND CLEARING REQUIREMENTS
 - NO REMOVAL, DEMOLITION, CLEARING OR TOPSOIL REMOVAL SHALL OCCUR ON SITE UNTIL THE SESC AND STORMWATER PERMITS HAVE BEEN ISSUED AND THE CONTRACTOR HAS VERIFIED AND STAKED THE LIMITS OF REMOVAL IN THE FIELD NOTIFY SITE CONSULTANT OF THE START OF CONSTRUCTION AND DATE WHEN THE LIMITS LINE WILL BE ESTABLISHED FOR REVIEW AND APPROVAL
 - CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS AND FEES FOR THE WORK
 - CONTRACTOR TO CALL 811 AT LEAST 3 DAYS PRIOR TO CONSTRUCTION TO CONFIRM LOCATION OF EXISTING UTILITIES
 - CONTRACTOR SHALL BE LICENSED BY THE STATE OF MICHIGAN FOR DEMOLITION, REMOVAL AND HAULING OF MATERIALS

DEMOLITION PLAN
1"=30'



LAKE MICHIGAN
AVERAGE LAKE
ELEVATION = 579.3'
4/13/18

- GENERAL NOTES:**
- CONTRACTOR TO OBTAIN ALL REQUIRED SITEMARK PERMITS CITY OF LUDINGTON WILL SECURE MDEQ/USACE JOINT PERMIT
 - CONTRACTOR TO CONTACT MISS DIG AT CALL811 AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO CONFIRM LOCATION OF EXISTING UTILITIES
 - CONTRACTOR MUST RESTORE AND REPAIR ANY EXISTING CONDITIONS DISTURBED BY CONSTRUCTION, THIS IS TO INCLUDE BURIED UTILITIES, LIGHTING, LANDSCAPING, ETC
 - ANY AREA DISTURBED BY CONSTRUCTION TO BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN BEFORE CONSTRUCTION BEGAN
 - CONTRACTOR TO PAINT STRIPE ALL PARKING SPACES, ROADS, AND DRIVES. PAINT COLOR TO BE WHITE H C SYMBOLS AND SPACES TO BE BLUE PAINT
 - THE CITY OF LUDINGTON WILL NOT BE RESPONSIBLE FOR FIELD DESIGN CHANGES MADE BY THE CONTRACTOR WHERE THESE DESIGN CHANGES HAVE NOT BEEN APPROVED BY THE CITY
 - DIMENSIONS SHOWN ARE TO FACE OF CURB (UNLESS NOTED OTHERWISE)
 - PROVIDE ACCESS TO MINI-GOLF AND SKATE PARK DURING CONSTRUCTION
 - UPON REQUEST ELECTRONIC LAYOUT INFORMATION FOR CONSTRUCTION STAKING WILL BE PROVIDED, CONTRACTOR SHALL REQUEST INFORMATION IN WRITING THROUGH PROGRESSIVE AE
 - AT CONTRACTORS DISCRETION, CONTRACTOR MAY USE CRUSH AND SHAPE METHOD OF REUSING EXISTING BITUMINOUS ASPHALT (CRUSHED) TO BE REMOVED AS BASE FOR NEW BITUMINOUS PAVEMENT GRADATION MUST MEET MDOT SPECIFICATIONS. THIS OPTION IS AT NO ADDITIONAL COST TO OWNER



LAYOUT PLAN
1"=30'

LAKE MICHIGAN
AVERAGE LAKE
ELEVATION = 579.3'
4/13/18

MDEQ - OHWM = 579.8 IGLD 55

IGLD 55 + 1.3 = NGVD 29
579.8 + 1.3 = 581.1
NGVD 29 + 0.3 = NAVD 88
581.1 - 0.3 = 581.8
NAVD 88 - 0.83 = LOCAL DATUM
581.8 - 0.8 = 580.0 (LOCAL DATUM)

US CORPS - OHWM = 581.5 IGLD 85

IGLD 85 - 0.7 = IGLD 55 (BASED ON OHWM ELEVATIONS
SHOWN IN CORPS IGLD 85 BROCHURE)

581.5 - 0.7 = 580.8
IGLD 55 + 1.3 = NGVD 29
580.8 + 1.3 = 582.1
NGVD 29 + 0.3 = NAVD 88
582.1 - 0.3 = 581.8
NAVD 88 - 0.83 = LOCAL DATUM
581.8 - 0.8 = 581.0 (LOCAL DATUM)



**GRADING AND
UTILITY PLAN**

GRADING NOTES

- REMOVE ANY EXISTING TOPSOIL, SURFACE ORGANIC SOILS, VEGETATION, UNSUITABLE FILL, AND DELETERIOUS MATERIAL TO THE DESIGN SUBGRADE LEVEL.
- PRIOR TO CONSTRUCTION OF SLABS, PAVEMENTS OR PLACEMENT OF STRUCTURAL FILL, THE FINAL SUBGRADE SHALL BE THOROUGHLY PROFFERED PER THE SPECIFICATIONS USING A FULLY LOADED 20 TO 30 TON TANDEM AXLE TRUCK UNDER THE OBSERVATION OF A GEOTECHNICAL ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL.
- FILL AREAS SHALL BE CONSTANTLY SLOPED FOR POSITIVE GRAVITY DRAINAGE TO AVOID PONDING WATER ON FILLS. FILL AREAS SHALL BE SEALED AT THE END OF EACH DAY BY SMOOTH-DRUM ROLLING WHEN THERE IS A THREAT OF PRECIPITATION.
- ON SITE SOIL MAY BE USED IN FILL AREAS PROVIDED THAT THEY ARE FREE OF ORGANIC MATTER, DEBRIS, EXCESSIVE MOISTURE, AND ROCK OR STONE FRAGMENTS LARGER THAN 3 INCHES IN DIAMETER.
- ALL FILL SHALL BE COMPACTED PER THE SPECIFICATIONS IN UNIFORM LAYERS NOT MORE THAN 8" THICK.
- REFER TO DWG. C103 FOR DETAILED SPOT ELEVATIONS.
- PROVIDE POSITIVE DRAINAGE AT ALL TIMES TO ENSURE NO STANDING WATER WITHIN PAVEMENT OR GREEN AREAS.
- SEE "TYPICAL PAVEMENT AT MH AND CB" DETAIL ON C103 FOR SPECIAL GRADING REQUIREMENTS AROUND STRUCTURES.
- RESTORE ALL STREET SURFACES, DRIVEWAYS, AND OTHER PUBLIC OR PRIVATE STREETS THAT ARE DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES TO MATCH AT A MINIMUM EXISTING CONDITIONS.
- CONTRACTOR'S MANNER AND METHOD OF INGRESS AND EGRESS WITH RESPECT TO THE PROJECT AREAS SHALL IN NO WAY PROHIBIT OR DISTURB NORMAL PEDESTRIAN OR VEHICULAR TRAFFIC IN THE VICINITY AND IS SUBJECT TO REGULATION AND WRITTEN APPROVAL OF APPROPRIATE GOVERNING AGENCIES.
- FINISHED SUBGRADE SURFACE SHALL NOT BE MORE THAN 0.1 FEET ABOVE OR BELOW ESTABLISHED FINISHED SUBGRADE ELEVATIONS AND ALL GROUND SURFACES SHALL VARY UNIFORMLY BETWEEN INDICATED ELEVATIONS.

GENERAL UTILITY NOTES

- VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- PROTECT AND MAINTAIN CROSSINGS OF OTHER UTILITIES.
- ALL DIMENSIONS ARE TO CENTERLINE OF PIPE, CENTER OF MANHOLE, EDGE OF PAVEMENT OR BACK OF CURB WHERE APPLICABLE.
- ALL MATERIAL, SPECIFICATIONS AND CONSTRUCTION METHODS SHALL BE IN CONFORMANCE WITH CITY OF LUDINGTON STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE MUNICIPAL AGENCIES.
- FOR TYPICAL PIPE TRENCH, SEE DETAIL A5/C103.
- REFER TO DWG. E101 FOR SITE ELECTRICAL PLAN.

WATER SERVICE NOTES

- INSTALL WATER SERVICE WITH A MINIMUM OF 5 FEET OF COVER.
- PROVIDE A MINIMUM OF EIGHTEEN (18) INCHES OF VERTICAL SEPARATION AND TEN (10) FEET OF HORIZONTAL SEPARATION BETWEEN THE WATER SERVICE AND ALL SANITARY AND STORM SEWERS WHERE APPLICABLE.
- PROVIDE RESTRAINED JOINTS PER CITY REQUIREMENTS AT ALL WATER SERVICE BENDS AND TEES.
- WATER SERVICE PIPE MATERIAL SHALL BE TYPE K COPPER OR AS APPROVED BY THE CITY OF LUDINGTON.

STORM SEWER NOTES

- STORM SEWER 12" AND LARGER SHALL BE REINFORCED CONCRETE PIPE ASTM C76 CLASS III WITH ASTM C443 GASKET JOINTS EXISTING CONDITIONS.
- END SECTIONS ARE INCLUDED IN PIPE LENGTHS SHOWN.
- PROVIDE INLET FILTER FOR ALL CATCH BASIN INLETS.
- PROVIDE RIPRAP AT ALL END SECTIONS UNLESS OTHERWISE NOTED.

EROSION CONTROL NOTES

- INSTALL EROSION CONTROL MEASURES AT THE LIMITS OF EARTHWORK PRIOR TO THE START OF ANY EARTHWORK OPERATIONS. ALL OTHER EROSION CONTROL MEASURES SHALL BE INSTALLED IN CONJUNCTION WITH THE CONSTRUCTION SCHEDULE AND SEQUENCE AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- MAINTAIN ALL EROSION CONTROL INSTALLATIONS DURING THE COURSE OF CONSTRUCTION. MAKE INSPECTIONS AFTER EACH STORM EVENT AND REPAIR OR REPLACE ANY DAMAGE. REMOVE ACCUMULATED SEDIMENT FROM SEDIMENT BASINS TO MAINTAIN EFFECTIVENESS OF EROSION CONTROL INSTALLATIONS. REPAIR ANY ERODED AREAS ON SLOPES OR NEAR SILT FENCE, REGRADE AND RESEED ANY TEMPORARY SEEDING AREAS AS NECESSARY TO PREVENT EROSION.
- THE EROSION CONTROL MEASURES INDICATED ON THIS PLAN ARE BASED ON "THE MICHIGAN SOIL EROSION & SEDIMENTATION CONTROL GUIDEBOOK". THE SOIL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED PER PLANS AND SPECIFICATIONS.
- KEEP PUBLIC ROADWAYS CLEAR OF ACCUMULATED SEDIMENT. SEDIMENTS SHALL BE REMOVED IMMEDIATELY UPON ENTERING PUBLIC ROADWAYS AND SHALL BE RETURNED TO THE LIKELY POINT OF ORIGIN. SEDIMENTS SHALL NOT BE FLUSHED OR WASHED FROM THE AREA WITH WATER.
- SILTSACK MANUFACTURED BY CSGEOTURF OR HANES GEO PRODUCTS OR APPROVED EQUAL SHALL BE USED FOR STORM INLET PROTECTION ITEM S58 (SEE S-E-S-C KEYING SYSTEM LEGEND).
- CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCE AROUND ALL SUBSOIL SPOIL AND TOPSOIL STOCKPILE FROM ANY DOWNSLOPE STREET, DRIVEWAY, DITCH OR DRAINAGE WAY.
- REMOVE TEMPORARY CONTROL MEASURES AS FOLLOWS:
PAVEMENT AREAS - MAINTAIN IN SERVICE UNTIL PREPARATION FOR PLACEMENT OF BITUMINOUS LEVELING COURSES
LAWN AREAS - REMOVE AFTER LAWN IS WELL ESTABLISHED AND ROOTED
- SILT FENCE SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND AFTER EVERY RAIN. SEDIMENT SHALL BE REMOVED IF DEPOSITS REACH HALF THE FENCE HEIGHT.
- CONTRACTOR WILL BE RESPONSIBLE FOR ALL TEMPORARY SOIL EROSION. OWNER WILL BE RESPONSIBLE FOR PERMANENT SOIL EROSION CONTROL.
- DUST CONTROL SHALL BE PROVIDED BY MEANS OF WATER DISTRIBUTION ON A REGULAR BASIS OVER AREAS THAT COULD POTENTIALLY PRODUCE DUST CONDITIONS.

CONSTRUCTION SCHEDULE & SEQUENCE	AUG. '18				
	SEPT.	OCT.	NOV.	DEC.	
INSTALL AND MAINTAIN TEMPORARY EROSION CONTROLS					
TOPSOIL STRIPPING & STOCKPILING					
ON-SITE UTILITIES					
SITE GRADING & EARTHWORK					
TOPSOIL SPREADING					
PERMANENT SEEDING					
PAVING					

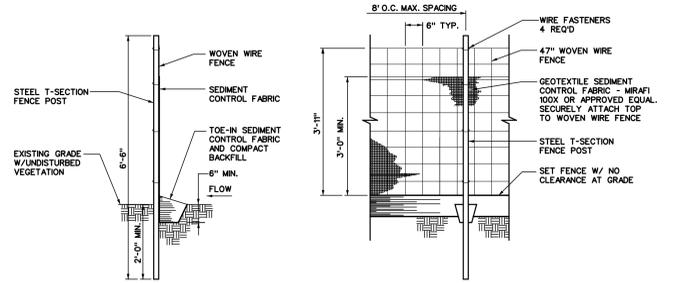
THIS CONSTRUCTION SCHEDULE IS PROVIDED TO INDICATE ANTICIPATED START DATES FOR SITE DISTURBANCE AND ANTICIPATED COMPLETION DATES FOR SITE STABILIZATION AS REQUIRED BY MASON COUNTY DRAIN COMMISSION FOR SOIL EROSION AND SEDIMENTATION CONTROL. EXACT START AND COMPLETION DATES FOR EACH ACTIVITY SHOULD BE COORDINATED WITH THE CONSTRUCTION MANAGER.

S-E-S-C KEYING SYSTEM

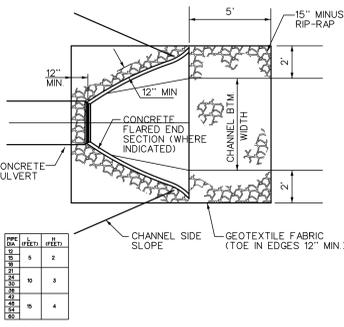
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
E12	RRRAP		Use along shorelines, waterways, or where concentrated flows occur. Slows velocity, reduces sediment load, and reduces erosion.
S51	SILT FENCE		Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
S53	STABILIZED CONSTRUCTION ACCESS		Used at every point where construction traffic enters or leaves a construction site.
S58	INLET PROTECTION FABRIC DROP		Use at stormwater inlets, especially at construction sites.

LAKE MICHIGAN
AVERAGE LAKE
ELEVATION = 579.3'
4/13/18

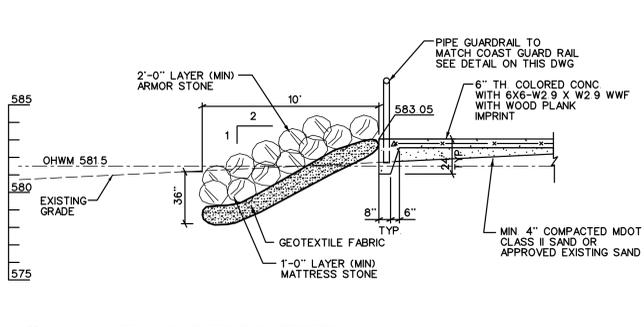
**SOIL EROSION AND
SEDIMENTATION
CONTROL PLAN**



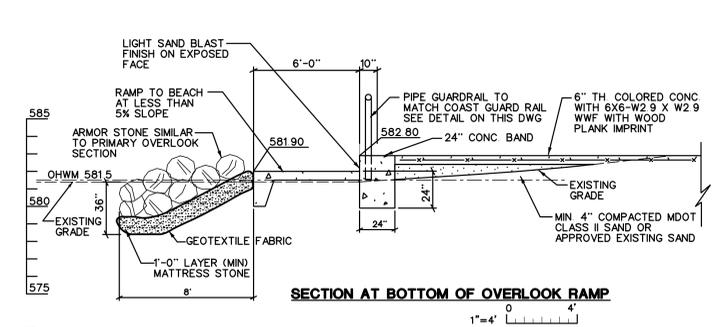
S51 SILT FENCE DETAIL WITH WOVEN WIRE FENCE
NO SCALE



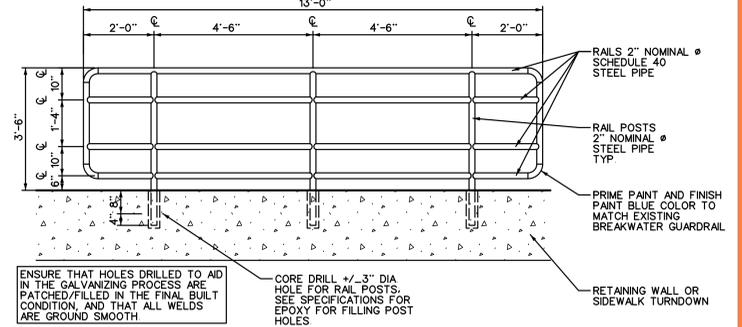
E1 RIP-RAP OUTLET DETAIL
NO SCALE



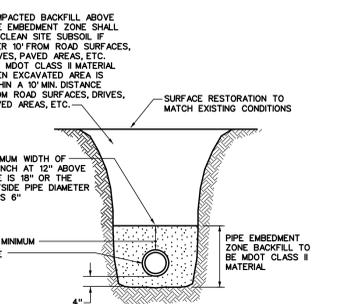
E2 PRIMARY OVERLOOK SECTION
1"=4"



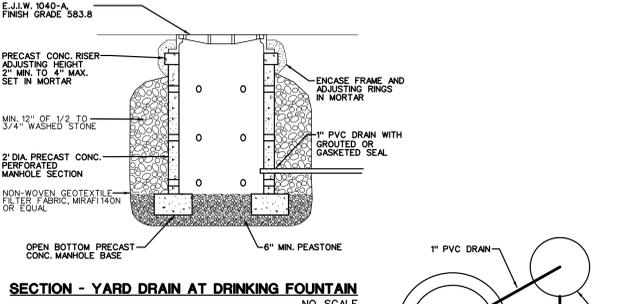
E4 SECTION AT BOTTOM OF OVERLOOK RAMP
1"=4"



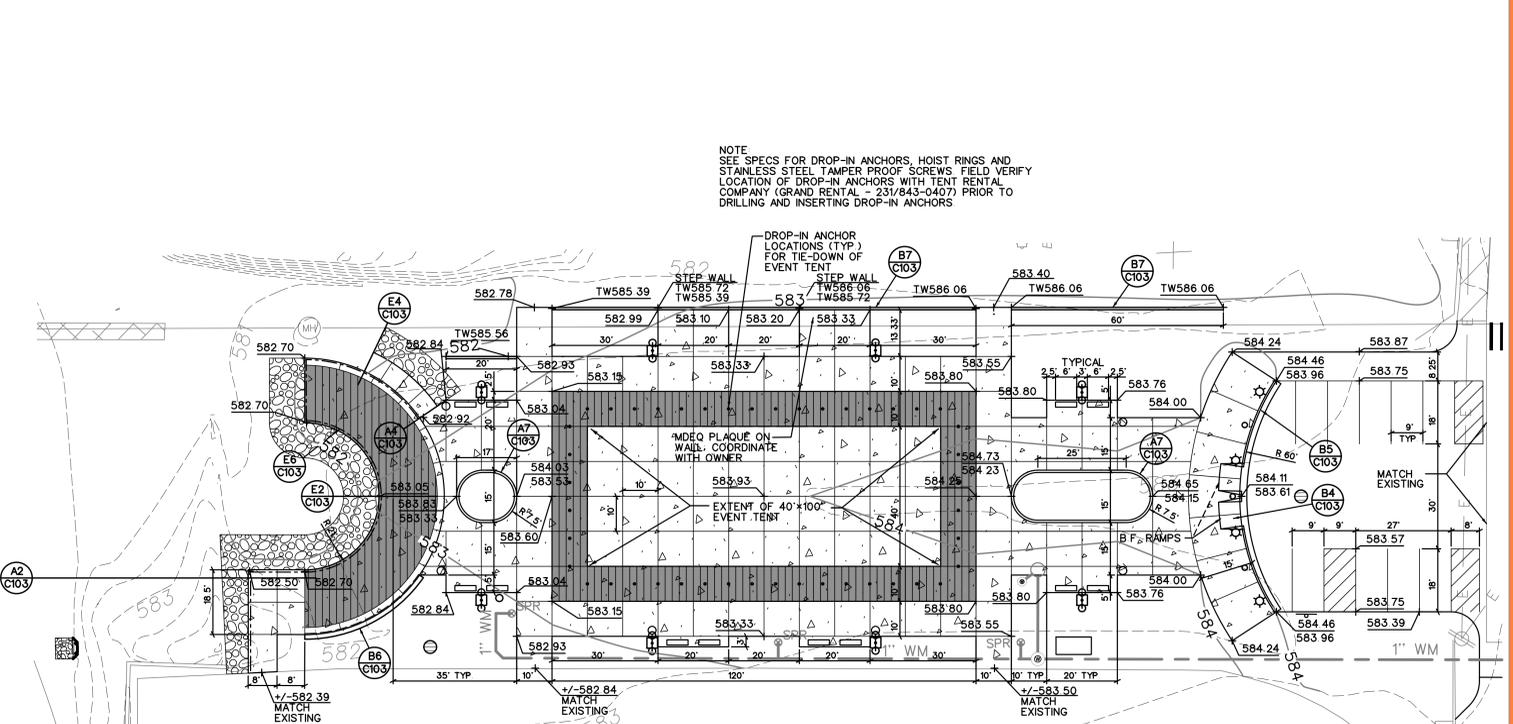
E6 TYPICAL PIPE GUARD RAIL SECTION
1"=2"



D1 TYPICAL PIPE BEDDING DETAIL
NO SCALE

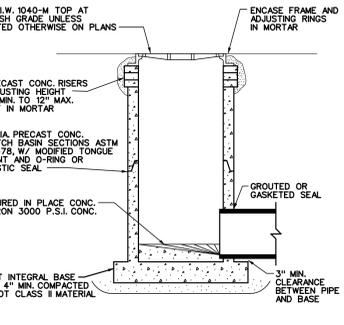


SECTION - YARD DRAIN AT DRINKING FOUNTAIN
NO SCALE

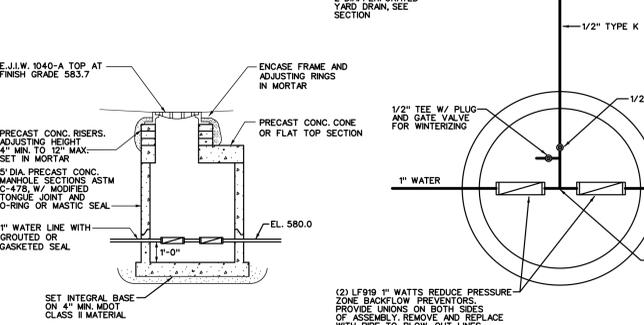


NOTE:
SEE SPECS FOR DROP-IN ANCHORS, HOIST RINGS AND STAINLESS STEEL TAMPER PROOF SCREWS. FIELD VERIFY LOCATION OF DROP-IN ANCHORS WITH TENT RENTAL COMPANY (GRAND RENTAL - 231/843-0407) PRIOR TO DRILLING AND INSERTING DROP-IN ANCHORS.

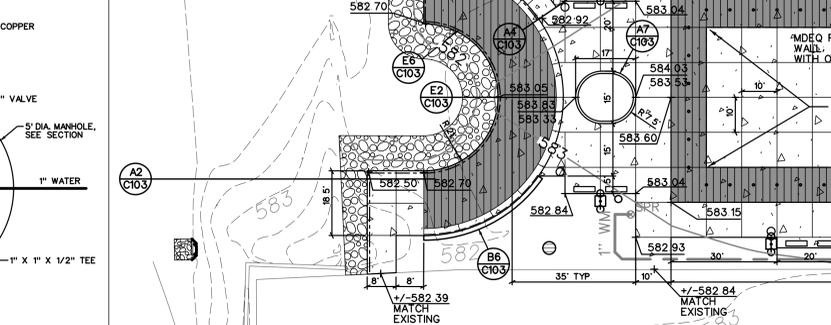
ENLARGED LAYOUT AND GRADING DETAIL
1"=20"



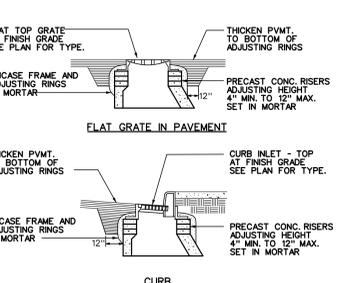
C1 TYPICAL DRAINAGE INLET
NO SCALE



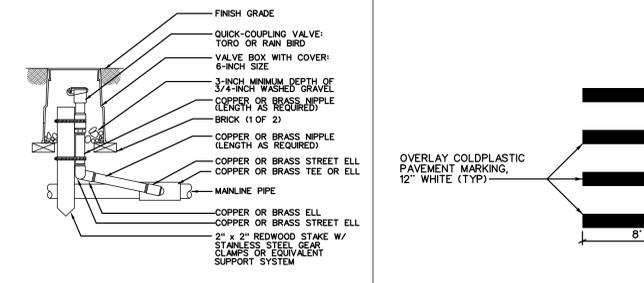
SECTION - BACKFLOW PREVENTOR PIT
NO SCALE



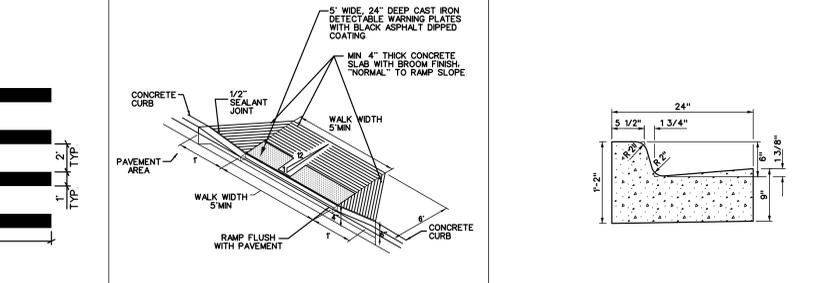
C3 PLAN - BACKFLOW PREVENTOR PIT
NO SCALE



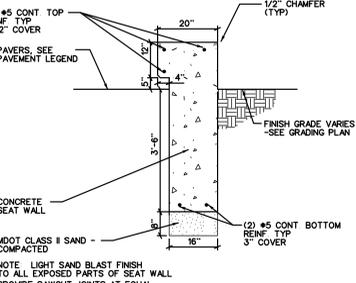
B1 TURNDOWN PAVEMENT AT DRAINAGE STRUCTURE
NO SCALE



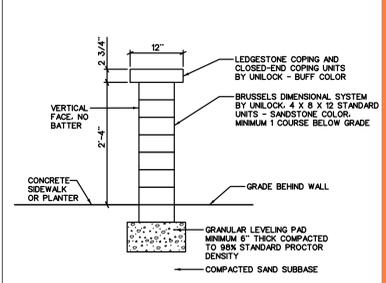
B2 QUICK-COUPLING VALVE
NO SCALE



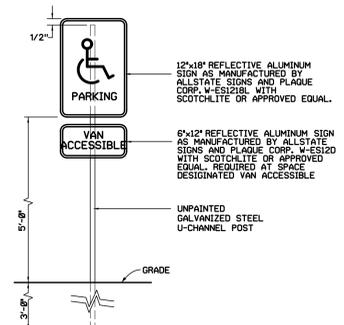
B3 CROSSWALK PAVEMENT MARKING
NO SCALE



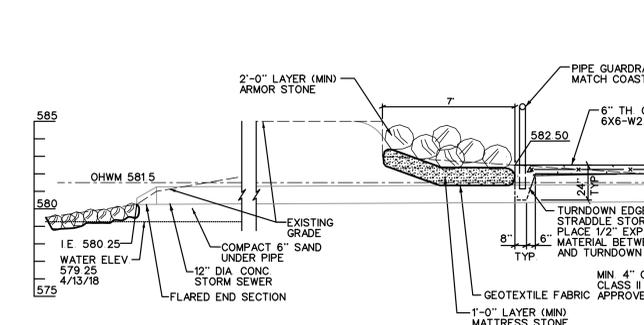
B6 CONCRETE SEAT WALL DETAIL
SCALE 1/2"=1'-0"



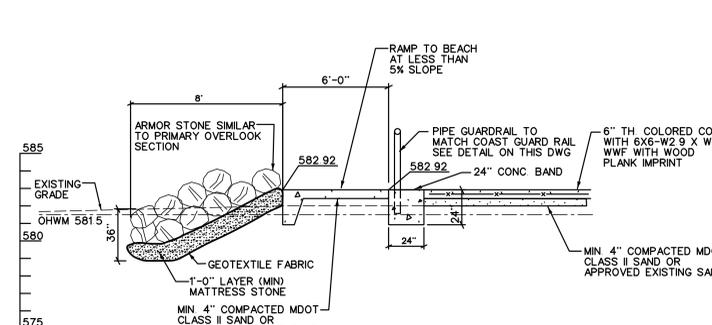
B7 SEGMENTAL BLOCK FREE STANDING WALL
SCALE 3/4"=1'-0"



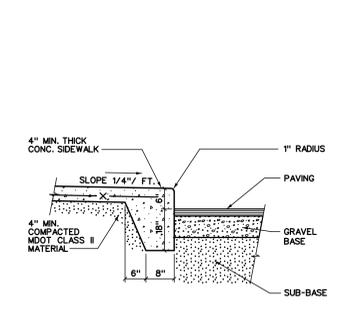
A1 BARRIER FREE PARKING SIGN DETAIL
NO SCALE



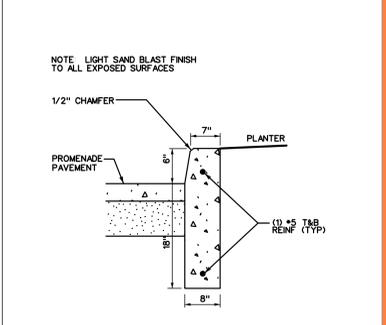
A2 OVERLOOK SECTION AT STORM PIPE
1"=4"



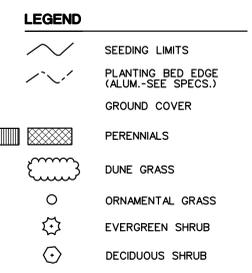
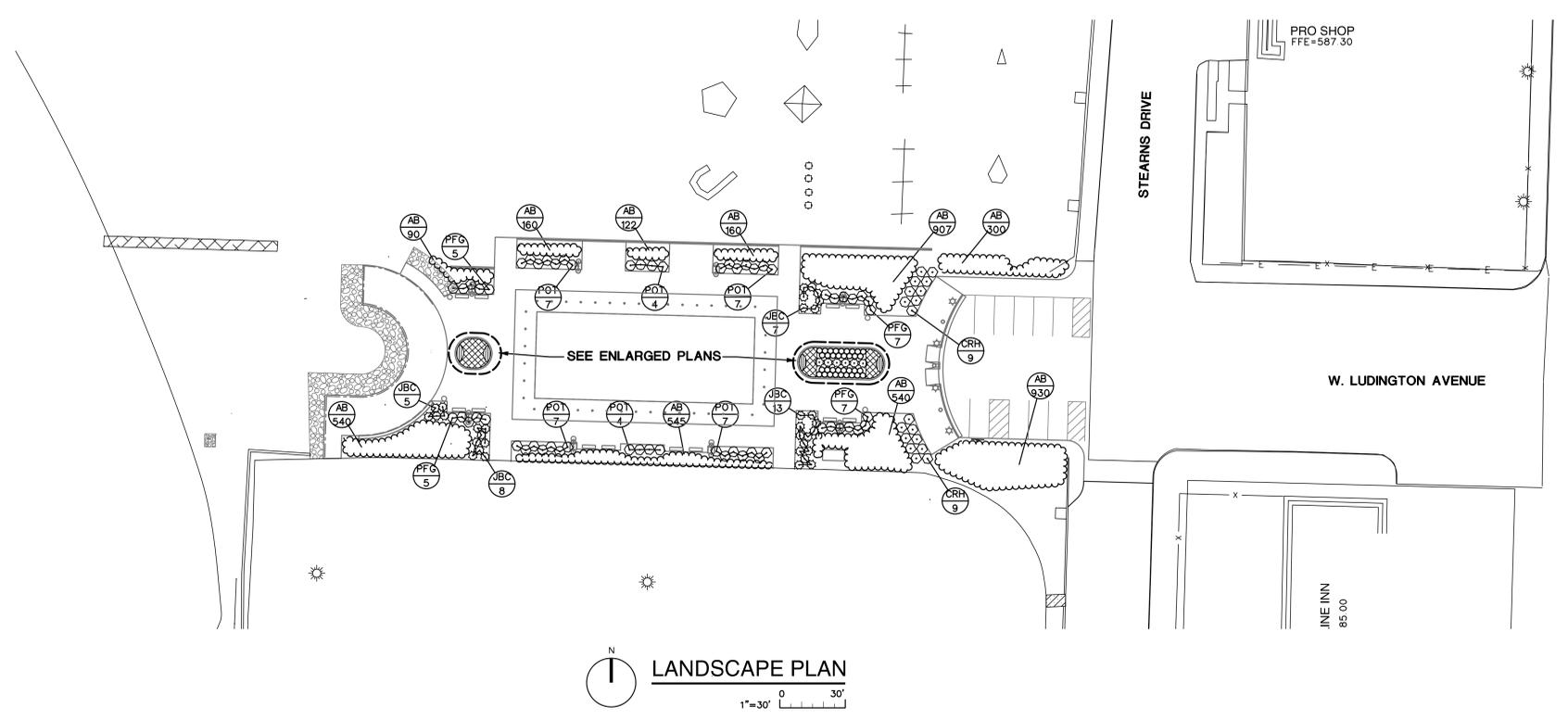
M SECTION AT TOP OF OVERLOOK RAMP
1"=4"



A6 INTEGRAL CONCRETE WALK / CURB
NO SCALE

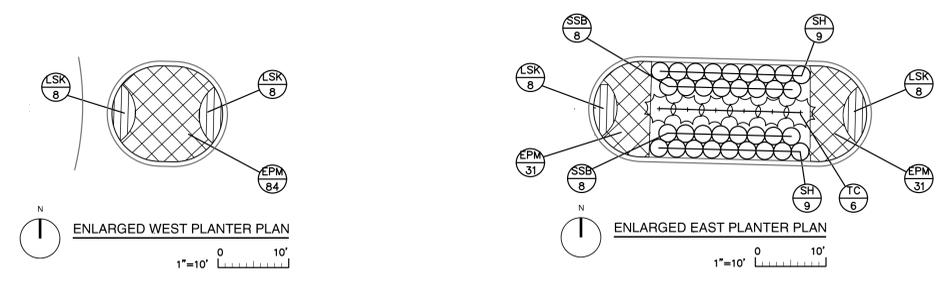


A7 RAISED PLANTER CURB DETAIL
NO SCALE



- GENERAL LANDSCAPE NOTES**
- SHRUB PLANTING BEDS RECEIVE 3" SHREDDED HARDWOOD MULCH, PERENNIAL BEDS TO RECEIVE 2" DEPTH MULCH AND GROUND COVER AREAS TO RECEIVE 1" DEPTH MULCH.
 - ALL SHRUB BEDS TO HAVE WEED BARRIER FABRIC (SEE SPECIFICATIONS).
 - CONTRACTOR TO CONTACT MISS DIG AT CALL#11 AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO CONFIRM LOCATION OF EXISTING UTILITIES.
 - PLANTING MIXTURE FOR PERENNIALS SHALL BE SIX INCH DEPTH OF FOUR PARTS BY VOLUME OF TOPSOIL TO ONE PART OF SPHAGNUM PEAT MOSS.
 - ALL SHRUB, PERENNIAL AND ORNAMENTAL GRASS AREAS SHALL HAVE 12 INCHES OF PLANTING SOIL OR TOPSOIL, BEACH GRASS AREAS CAN BE SAND.

- DUNE GRASS**
- PLANT DUNE GRASSES AFTER SEPTEMBER 1ST OR BEFORE JUNE 1ST, UNLESS OTHERWISE APPROVED BY OWNER.
 - PLANT BEACH GRASS IN MINIMUM OF 6 INCH DEPTH OF CLEAN SAND.
 - PLUGS GROWN BY LICENSED GROWER WITH 5 OR MORE YEARS EXPERIENCE. PLUGS SHALL BE WELL ROOTED NATIVE MICHIGAN DUNE GRASS AND INSTALLED PER INDUSTRY STANDARDS. CONTRACTOR SHALL PROVIDE ONE YEAR WARRANTY.



PLANT LIST

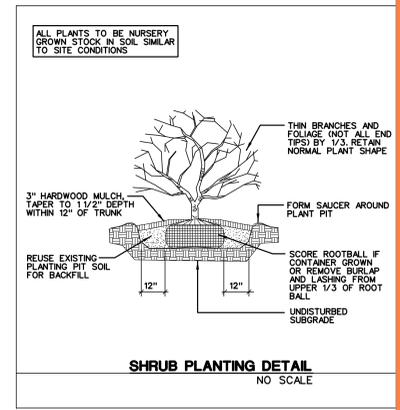
ABBRV.	BOTANICAL NAME	COMMON NAME	COMMENTS
AB	AMMOPHILA BREVILIGNATA	AMERICAN BEACH GRASS	STOLENS: 12" O.C.
CRH	CORNUS RACEMOSA 'HURZAM'	HURZAM GRAY DOGWOOD	24" x 45 CONT.
EPM	ECHINACEA PURPUREA 'MAGNUS'	MAGNUS PURPLE CONEFLOWER	#1 POT; 18" O.C.
JBC	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	15" SPREAD; #3 CONT.
LSK	LIATRIS SPICATA 'KOBOLD'	KOBOLD SPIKE GAYFEATHER	#1 POT; 18" O.C.
PFC	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER POTENTILLA	18"; NO. 3 CONT.
POT	PHYSOCARPUS OPILOIFOLIUS 'TINY WINE'	TINY WINE NINEBARK	24"; NO. 3 CONT.
SH	SPOROBOLUS HETEROLEPSIS	PRAIRIE DROPSSEED	#1 POT; 30" O.C.
SSB	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	THE BLUES LITTLE BLUESTEM	#1 POT; 30" O.C.
TC	TAXUS CANADENSIS	CANADA YEW	24" x 45 CONT.

ABBRV. QUANTITY (IF LETTER - SEE CHART BELOW)

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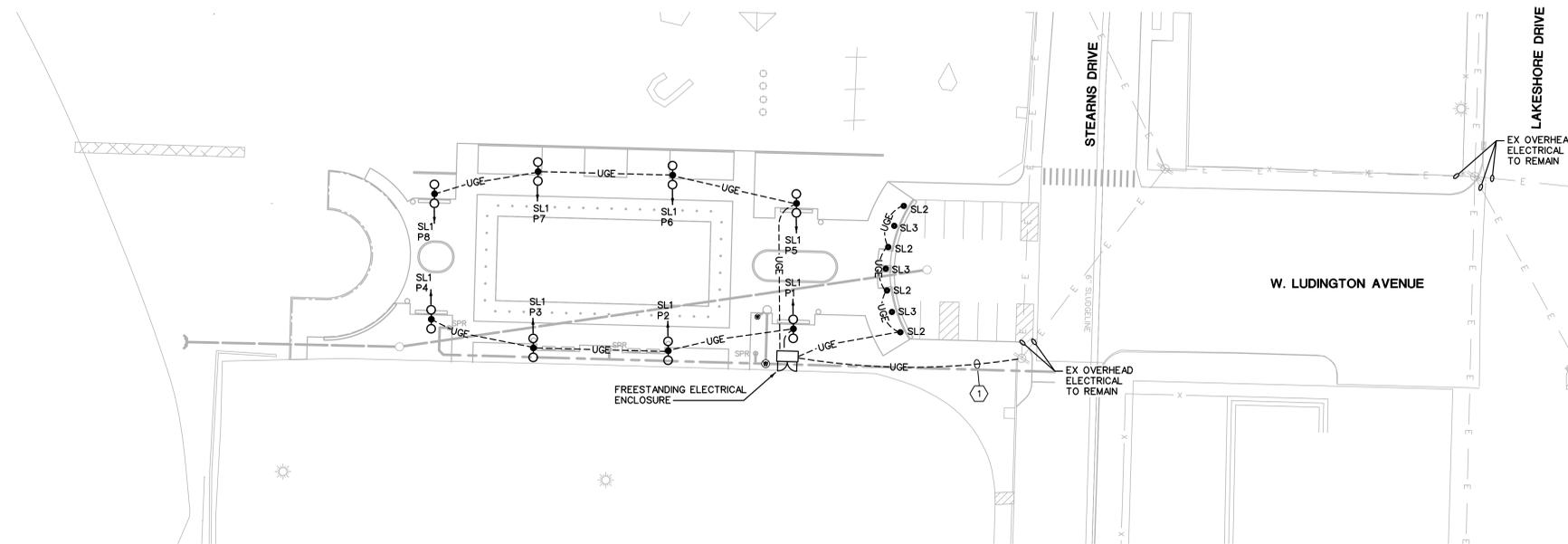
ISSUANCES
 BIDS AND CONSTRUCTION
 08/17/2018

REVISIONS
 NO. DATE DESCRIPTION



FILE NUMBER: 60096003
 PROJECT MANAGER: CHH
 PROFESSIONAL: DCM
 DRAWN BY: DCM
 CHECKED BY:

LANDSCAPE PLAN



ELECTRICAL PLAN
1"=30'

SYMBOL LEGEND:

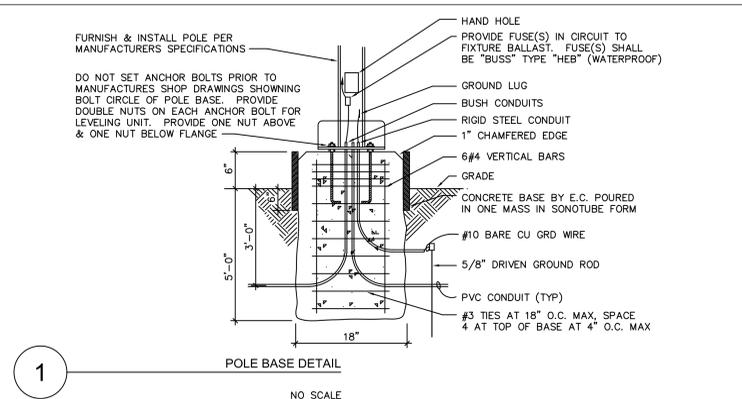
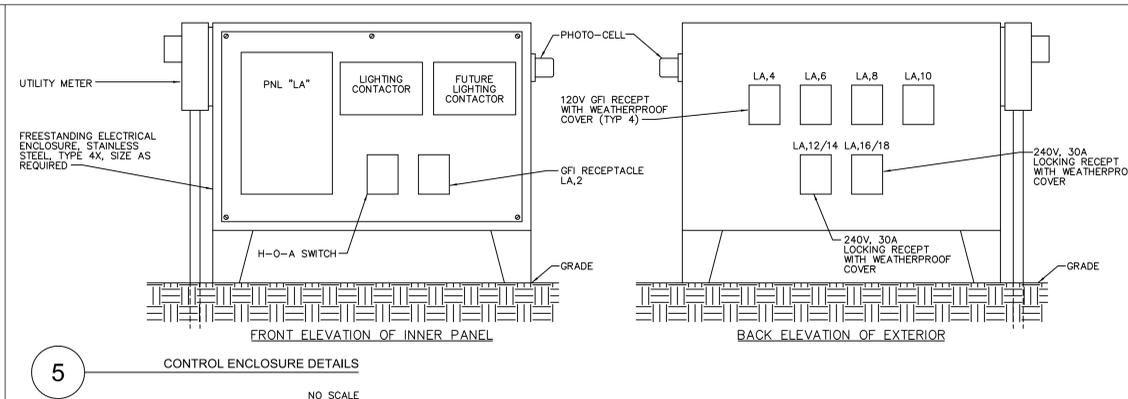
--UG--	UNDERGROUND ELECTRICAL BY EC
--UGEP--	UNDERGROUND ELECTRICAL, UTILITY PRIMARY SERVICE BY OTHERS
--UGES--	UNDERGROUND ELECTRICAL, UTILITY SECONDARY SERVICE BY OTHERS
--UGT--	UNDERGROUND TELEPHONE
--UGSTL--	UNDERGROUND ELECTRICAL STREET LIGHTING BY OTHERS

KEY NOTES:

1 UNDERGROUND SERVICE FROM CONSUMERS ENERGY

GENERAL NOTES:

1 ELECTRICAL CONTRACTOR TO COORDINATE ALL WORK BY ELECTRICAL & TELEPHONE UTILITIES



LIGHTING FIXTURE SCHEDULE

MARK	FIXTURE TYPE	LUMINAIRE	POLE	LAMP	COMMENTS
SL1	POLE MOUNT HID - TWIN ARM	ALUMLITE #VK-S170/LED-UV-35K-RF3-BK	POLE TBD	3500K LED	GFI RECEPTACLE, BANNER ARMS 1 2
SL2	HID BOLLARD	ALUMLITE #HB-B39/LED-UV-42-35K-BK-FG	---	3500K LED	
SL3	UNLIGHTED BOLLARD	SAME AS SL2 EXCEPT NO LAMP OR BALLAST ASSEMBLY	---	---	BOLLARD TO LOOK LIKE SL2 BOLLARD

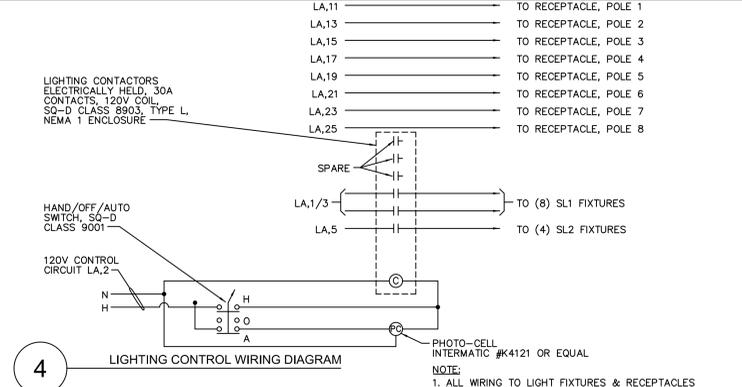
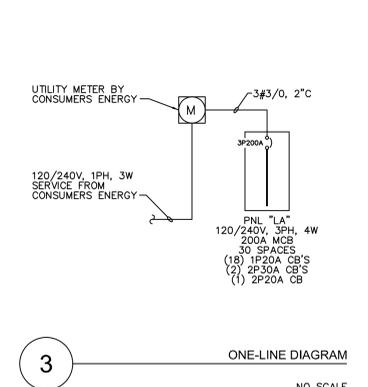
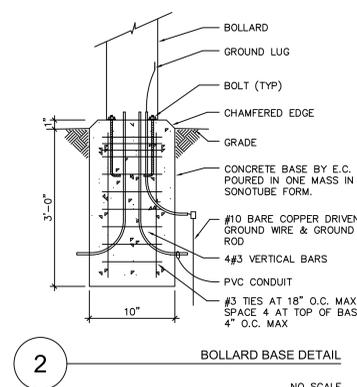
NOTES

1 GFI RECEPTACLE TO BE MOUNTED AT 20" FROM BOTTOM OF POLE ON SIDE OF POLE OPPOSITE THE BANNER ARM.

2 BANNER ARMS TO BE SIZED FOR BANNERS THAT ARE 30"W x 36"L. SEE PLANS FOR BANNER ARM ORIENTATION.

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT (TO CENTERLINE OR AS NOTED)
○●---	POLE MOUNT HID - TWIN ARM (ARROW INDICATES ORIENTATION OF BANNER ARM)	---
●	POLE MOUNT HID - SINGLE ARM	---
○●---	POLE MOUNT HID - SINGLE ARM (ARROW INDICATES ORIENTATION OF BANNER ARM)	---



NOTE:
1. ALL WIRING TO LIGHT FIXTURES & RECEPTACLES TO BE #10 AWG MIN IN 1" PVC CONDUIT.

7/20/2018 8:52:24 AM
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