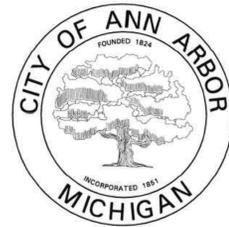


WHEELER FACILITY POND DREDGING

4170 PLATT ROAD

CITY OF ANN ARBOR

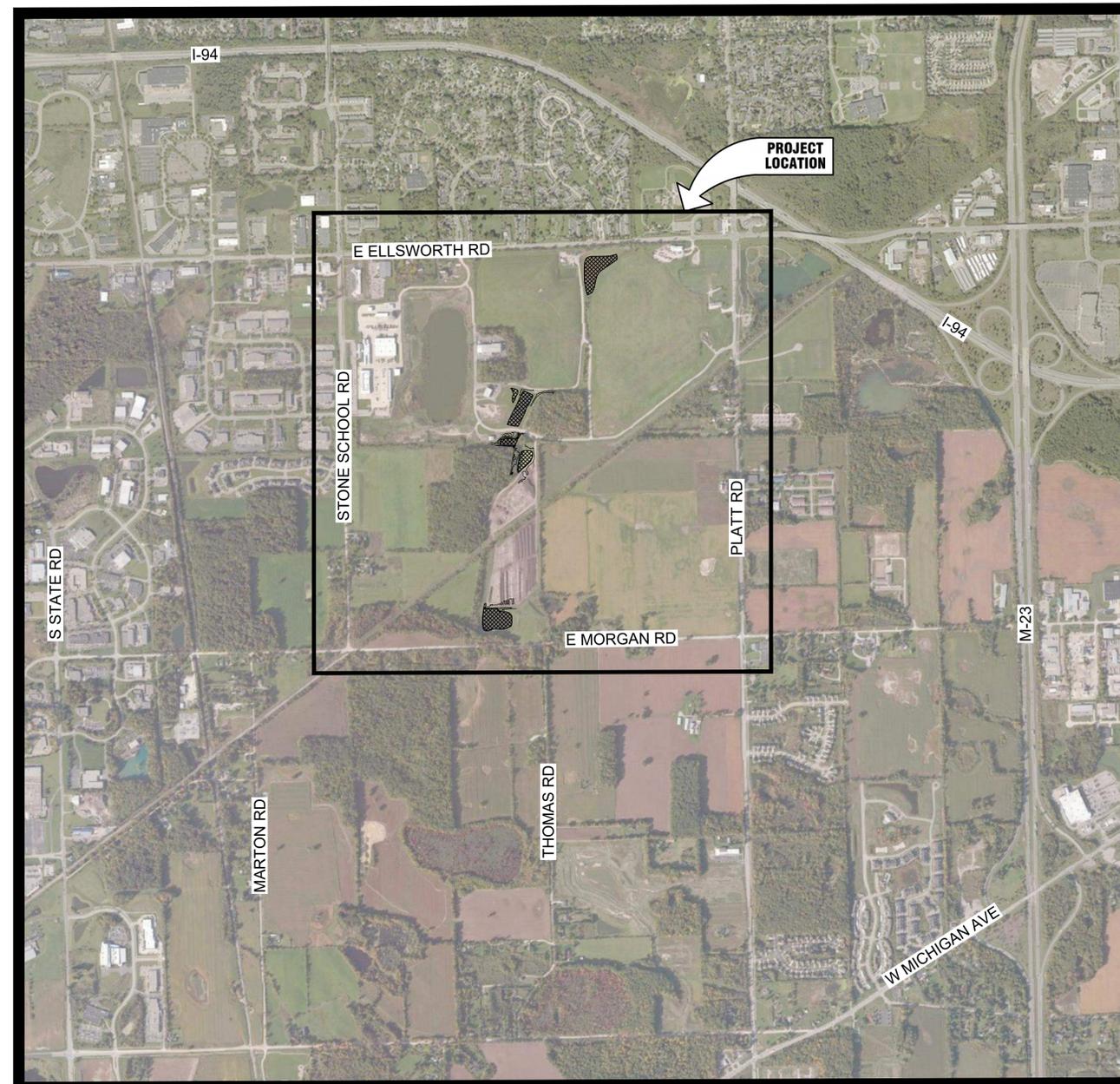
WASHTENAW COUNTY, MICHIGAN



CITY OF ANN ARBOR PUBLIC WORKS

4251 STONE SCHOOL ROAD
ANN ARBOR, MI 48108
PHONE: (734) 794-6350

WEB SITE: <https://www.a2gov.org/departments/public-works/Pages/default.aspx>



SHEET INDEX

DESCRIPTION	SHEET NO.
COVER	A
PROJECT NOTES	B
PROJECT DETAILS	C
PROJECT DETAILS	D
SOIL EROSION & SEDIMENT CONTROL DETAILS	1
OVERALL SITE PLAN	2
SOUTH COMPOST PAD POND	3
NORTH COMPOST PAD POND & MAINTENANCE POND	4
FOREBAY & TRANSFER POND	5
LANDFILL POND	

HRC
HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

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WEB SITE: <http://www.hrc-engr.com>

NOTE:
ALL EXISTING UTILITIES SHOWN ON THIS TOPOGRAPHICAL SURVEY HAVE BEEN TAKEN FROM VISUAL OBSERVATION, AND RECORD MAPPING WHERE AVAILABLE. NO GUARANTEE IS MADE, OR SHOULD BE ASSUMED, AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITIES SHOWN ON THIS DRAWING. PARTIES UTILIZING THIS INFORMATION SHALL FIELD VERIFY THE ACCURACY AND COMPLETENESS PRIOR TO CONSTRUCTION ACTIVITIES.



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BEFORE YOU DIG

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Call before you dig. OR 811
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DATE	ADDITIONS AND/OR REVISIONS
02/08/21	SECOND CITY REVIEW
09/24/20	ISSUED TO CITY FOR REVIEW
06/18/20	DRAFT PLANS

GENERAL NOTES:

COOPERATION BY THE CONTRACTOR: NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO MATERIAL SHORTAGES OR REASONABLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE PROPOSAL OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OF EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.

LIMITATIONS ON PRIVATE WORK: DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT WITHOUT PRIOR OWNER CONSENT. WORK MAY BE ALLOWED WHEN REQUESTED, BUT ONLY WITH WRITTEN CONSENT.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES FOR NOISE LEVELS, VIBRATIONS, OR ANY OTHER RESTRICTIONS WHILE PERFORMING ANY CONSTRUCTION OPERATIONS WITHIN THIS CONTRACT, COSTS TO BE INCLUDED IN THE RESPECTIVE ITEM OF WORK.

THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE CITY OF ANN ARBOR FIRE & POLICE DEPARTMENTS, POST OFFICE, AND THE CITY 24 HOURS IN ADVANCE OF PROPOSED ROAD CLOSURES, OR TEMPORARY TRAFFIC CONTROL MEASURES.

THE CONTRACTOR SHALL, BEFORE EACH DAY'S WORK, OR WHEN MOVING TO A NEW AREA OF WORK, DETERMINE AND EVALUATE THE LOCATION OF ALL UNDERGROUND FACILITIES IN THE AREA. IF LOCATION STAKES HAVE BEEN MOVED OR DO NOT APPEAR CORRECT, THE CONTRACTOR SHALL NOT EXCAVATE UNTIL ALL UTILITIES HAVE HAD AN OPPORTUNITY TO CHECK OR RE-STAKE THEIR LOCATIONS. ANY DELAYS INCURRED, DUE TO THE CHECKING OR RE-STAKING OF UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.

THERE WILL BE NO ADJUSTMENT IN THE CONTRACT UNIT PRICE REGARDLESS OF THE PERCENTAGE OF INCREASE OR DECREASE ABOVE OR BELOW THE CONTRACT QUANTITY FOR ANY ITEM OF WORK.

IT IS THE INTENT THAT ALL GOVERNMENT CORNERS ON THIS PROJECT BE PRESERVED AND THAT, WHERE NECESSARY, MONUMENT BOXES BE PLACED OR ADJUSTED, AT THE CONTRACTORS EXPENSE WHETHER SHOWN OR NOT.

THE LOCATION OF ALL PUBLIC UTILITIES SHOWN ON THESE PLANS IS TAKEN FROM THE BEST AVAILABLE DATA. THE OWNER & HUBBELL, ROTH AND CLARK, INC. WILL NOT BE HELD RESPONSIBLE FOR ANY OMISSION OR VARIATIONS FROM THE LOCATIONS SHOWN. PURSUANT TO ACT 53 OF THE PA OF 1974 AS A CONDITION OF THIS CONTRACT NOTICE SHALL BE GIVEN TO MISS DIG PRIOR TO UNDERGROUND WORK TO BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT. PHONE (800)-482-7171 OR 647-7344.

CONTRACTOR TO SUBMIT DETAILED CONSTRUCTION SEQUENCE AT THE PRECONSTRUCTION MEETING NOTING ALL CHANGES TO PROPOSED SCHEDULE OF WORK PROPOSED OR WORK PROPOSED TO OCCUR CONCURRENTLY WITH OTHER ITEMS OF WORK.

CONSTRUCTION NOTES:

DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WHEN APPROVED BY THE ENGINEER. VEHICULAR ACCESS SHALL BE MAINTAINED AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL NECESSARY DRIVEWAY CLOSURES WITH THE COMPOST FACILITY OPERATOR IN THE AREAS OF CONSTRUCTION.

THE LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LEADS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

LOCATION AND DEPTH OF UTILITIES AS DEPICTED ON THE PLANS IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND ADJUST DEPTH OF UTILITIES IN CONFLICT ACCORDINGLY. AND DAMAGE TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID AND/OR REPAIR AS NECESSARY.

DURING NON-WORKING HOURS, NO MORE THAN 25 FEET OF TRENCH SHALL REMAIN OPEN. ANY OPEN TRENCH SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING. THIS WORK SHALL NOT BE PAID SEPARATELY BUT INCLUDED IN THE COST OF THE PROJECT.

ALL TRENCHES SHALL BE EXCAVATED TO MIOSHA REQUIREMENTS, INCLUDING ANY REQUIRED TRENCH DESIGNS OUTLINED IN PART 9 OF THE GUIDELINES.

THE CONTRACTOR SHALL BACKFILL TRENCHES IN ACCORDANCE WITH TRENCH DETAILS SPECIFIED ON THE PLANS. CONCRETE REMOVALS AND REPLACEMENTS REQUIRED FOR THIS WORK WILL BE PAID SEPARATELY.

POSTAL DELIVERY AND REFUSE PICKUP SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.

WHEN STREET CURBS ARE UNDERMINED DUE TO CONSTRUCTION ACTIVITIES, THEY SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.

ALL CURB, SIDEWALK AND DRIVEWAY APPROACH REMOVALS SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK BEING COMPLETED.

SAWED SEWER PIPE CONNECTIONS SHALL BE COUPLED WITH A FERNOCO FLEXIBLE COUPLING AND A STAINLESS STEEL SHEAR RING.

THE LOCATION OF MATERIAL STOCKPILES AND ONSITE STAGING AREAS SHALL BE APPROVED BY THE ENGINEER.

ALL STRUCTURES RECEIVING NEW CASTINGS AS DIRECTED BY THE ENGINEER, AS SPECIFIED BY THE CASTING SCHEDULE. THE EXISTING CASTINGS SHALL BECOME THE PROPERTY OF THE CITY OF ANN ARBOR.

PAYMENT FOR DRAINAGE STRUCTURE SUMPS, WHERE SPECIFIED, SHALL BE INCLUDED IN THE PAYMENT FOR THE VARIOUS DRAINAGE STRUCTURE SIZE AND/OR TYPES.

WHERE SEWER PIPES OF DIFFERENT SIZES OR MATERIALS ARE JOINED, FERNOCO FLEXIBLE COUPLINGS WITH STAINLESS STEEL SHEAR RINGS SHALL BE USED. THE CONTRACTOR'S PURCHASE PRICE FOR THESE DEVICES, INCLUDING SHIPPING, SHALL BE PAID AS AN EXTRA. PRIOR TO PAYMENT OF THIS ITEM, THE CONTRACTOR SHALL SUBMIT RECEIPTS FOR THE ENGINEER'S REVIEW AND APPROVAL. ALL OTHER COSTS ASSOCIATED WITH THE INSTALLATION OF THESE DEVICES SHALL BE INCLUDED IN THE PAYMENT OF THE SEWER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE SLOPE STAKE LINE, INCLUDING EXISTING FENCING, LAWN, TREES AND SHRUBBING.

TRAFFIC MAINTENANCE & CONTROL

ON-SITE TRAFFIC SHALL BE MAINTAINED SO AS TO NOT INTERFERE OR INTERRUPT THE OPERATIONS OF THE COMPOSTING FACILITY OPERATIONS. CONTRACTOR TO COORDINATE WITH SITE OPERATIONS MANAGER AND PUBLIC WORKS OPERATIONS PRIOR TO START OF CONSTRUCTION

TRAFFIC MAINTENANCE & CONTROL REQUIRED SHALL BE INCIDENTAL TO DREDGING OPERATIONS

ALL CONSTRUCTION TRAFFIC SHALL USE THE PLATT ROAD ENTRANCE

SITE ACCESS & OPERATIONS SHALL BE COORDINATED WITH THE CITY AND SITE OPERATIONS MANAGER FROM "WE CARE"

DREDGING

DREDGING IS BASED ON SURVEYED CROSS-SECTIONS AND PROFILES. ACTUAL ELEVATIONS TO BE STAKED IN THE FIELD.

CONSTRUCTION STAKING:

GRADING LIMITS, ELEVATIONS, AND LOCATIONS OF STRUCTURES AND BANK TREATMENTS SHALL BE STAKED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE OF STAKING NEEDS PRIOR TO WORK COMMENCING. THE CONTRACTOR SHALL MAINTAIN ALL STAKING THROUGH THE DURATION OF THE PROJECT.

UTILITIES

THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES WITHIN THE PROJECT LIMITS:

Table with columns: PUBLIC UTILITIES, OWNER, CONTACT. Rows include Forestry, Sanitary Sewer, Storm Sewer, Traffic Signs & Signals, Water System, Private Utilities, Gas, Electric, Phone, Cable, ITC, Fiber Optic.

ALL UTILITIES WITHIN ZONE OF INFLUENCE OF PROPOSED WORK ARE TO BE FIELD LOCATED AND HAND DUG INCLUDED IN THE UNIT BID PRICES FOR APPROPRIATE ITEMS.

ALL GAS FACILITIES SHALL BE PROTECTED AND SUPPORTED PER DTE STANDARDS AS APPLICABLE

PRIOR TO WORK ON FACILITIES BELONGING TO THE ABOVE AGENCIES, A MINIMUM OF 72 HOURS NOTICE MUST BE GIVEN IN ORDER TO INSURE PROPER INSPECTION BY THE RESPECTIVE AGENCIES.

CONCRETE, GRADE S3, SHALL BE USED TO ENCASE UTILITIES THAT ARE IN CLOSE PROXIMITY TO THE PROPOSED CONSTRUCTION ONLY AS DIRECTED BY THE ENGINEER.

ALL EXPLORATORY WORK REQUIRED FOR LOCATING EXISTING UTILITIES SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONSTRUCTION OF THE PROJECT.

THE EXISTING UTILITIES LISTED HEREIN AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED FROM SURVEYS AND FROM UTILITY RECORD MAPS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO SATISFY HIMSELF AS TO THEIR ACCURACY OR OF HIS RESPONSIBILITY IN CASE UTILITIES HAVE BEEN CONSTRUCTED, RELOCATED OR REMOVED. OWNERS OF PRIVATE UTILITIES WILL NOT BE REQUIRED TO MOVE ADDITIONAL POLES AND STRUCTURES THAT ARE NOT SPECIFICALLY INDICATED AS SUCH ON THE PLANS.

THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK, AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO INSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL 800-482-7171 A MINIMUM OF 3 WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS. PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING WILL BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

STAGING AREA NOTES

STAGING AREA FOR PROJECT SHALL BE LIMITED TO THE AREA SHOWN ON THE PLAN SHEETS.

IF THE CONTRACTOR WOULD LIKE TO PROPOSE ANOTHER STAGING AREA LOCATION, THE LOCATION MUST BE SUBMITTED IN WRITING TO BE APPROVED BY THE ENGINEER.

RESTORATION OF THE STAGING AREAS IS INCLUDED IN THE QUANTITIES OF SEED AND TOPSOIL/COMPOST AND IS PAID AS PART OF THOSE ITEMS

CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING DAMAGED PAVEMENT CAUSED BY ACTIVITIES OUTSIDE THE WORK AREA AND DESIGNATED HAUL ROUTE.

THE STAGING AREA MUST BE FENCED OFF FROM THE PUBLIC, AND ONLY CONSTRUCTION RELATED TRAFFIC WILL BE PERMITTED WITHIN ITS LIMITS.

SESC MEASURES REQUIRED AT STAGING AREAS ARE INCLUDED IN QUANTITIES

HEAVY EQUIPMENT ACCESS AND OPERATION

THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF CONSTRUCTION AND MINIMIZE THE AREA AND DURATION OF DISTURBANCE AT ALL TIMES. ALL OTHER TREE CLEARING NECESSARY TO CONSTRUCT THE PROJECT PER THE PLANS AND FOR SITE ACCESS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE, AND APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL USE REASONABLE MEASURES TO AVOID SOIL COMPACTION BY HEAVY EQUIPMENT.

CONTRACTOR SHALL USE EQUIPMENT SUITABLE FOR WORK IN THE PONDS. THE INSPECTOR RESERVES THE RIGHT TO EXCLUDE ANY EQUIPMENT DEEMED UNACCEPTABLE TO ENTER THE PONDS DUE TO LEAKING FLUIDS, ACCUMULATED SEDIMENT OR OTHER POTENTIAL HAZARDS TO WATER QUALITY. TEMPORARY RIP RAP OR OTHER MEANS AS NECESSARY SHALL BE USED TO PROTECT THE BANKS WHEN ENTERING OR EXITING THE PONDS. THE ACCESS PATH WILL BE GRADED AND STABILIZED BY THE CONTRACTOR TO SUPPORT OPERATIONS WHILE MINIMIZING DISRUPTION AND RESTORATION. THE CONTRACTOR SHALL PROVIDE ACCESS PLANS AND DETAILS FOR REVIEW AT THE PRECONSTRUCTION MEETING. ALL COSTS ASSOCIATED WITH THE CONTRACTOR'S CHOSEN MEANS OF ACCESS SHALL BE INCIDENTAL TO THE PROJECT AND INCLUDED IN OTHER LINE ITEMS AS NECESSARY. THE CONTRACTOR WILL NOT BE COMPENSATED FOR EXCESS CLEARING, GRADING, OR RESTORATION DUE TO THE CONTRACTOR'S OPERATIONS SELECTED.

ALL EQUIPMENT ENTERING THE SITE SHALL COMPLY WITH THE SPECIAL PROVISION PREVENT SPREADING OF INVASIVE SPECIES CONTROL MEASURES.

MISCELLANEOUS

FOR PROPOSED WORK IN AREAS CLOSE TO UTILITY POLES, NO EXCAVATIONS WITHIN TEN (10) FEET AND NO BORES WITHIN (3) FEET FROM THE UTILITY POLES ARE ALLOWED.

CONTRACTOR RESPONSIBLE TO REPAIR OR REPLACE ANY EXISTING TRAFFIC SIGNS DAMAGED BY OPERATION DURING CONSTRUCTION. SIGNS TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MMUTCD.

ACCESS TO AREAS OUTSIDE OF PROJECT LIMITS TO BE APPROVED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION.

CONTRACTOR TO COORDINATE CONSTRUCTION ACTIVITIES WITH OTHER CONTRACTORS WORKING IN AREA.

ANY DEWATERING NECESSARY TO CONSTRUCT THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND ALL COSTS ASSOCIATED SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE AFFECTED UTILITY INSTALLATION.

ALL UTILITY CROSSINGS TO HAVE A MINIMUM OF 18" VERTICAL CLEARANCE TYPICAL.

NO RAP (RECYCLED ASPHALT PRODUCTS) WILL BE ALLOWED IN ANY WEARING COURSE.

NO BROKEN CONCRETE IN ANY RIP RAP WILL BE ALLOWED ON THIS PROJECT.

RESTORATION

RESTORATION OF THE SITE SHALL BE IN ACCORDANCE WITH THE FOLLOWING AND SHALL BE PAID FOR AS INDICATED BELOW:

- 1. ALL DISTURBED AREAS SHALL BE RESTORED WITH SPECIFIED SEED MIX.

REMOVE ALL CONSTRUCTION EQUIPMENT, EXCESS MATERIALS, DEBRIS, ETC., ESTABLISH FINE GRADE, AND RESTORE (PER PLANS AND SPECIFICATIONS). ALL COSTS FOR THE LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN UNIT PRICE BID FOR GRADING.

REMOVE ANY HAUL ROADS OR ACCESS ROADS, MATERIAL STOCKPILES, AND CONSTRUCTION FENCING. THIS SHALL BE CONSIDERED INCIDENTAL TO PROJECT ITEM.

ALL PAVEMENT DAMAGED DURING CONTRACTOR OPERATIONS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR TO THE CITY OF ANN ARBOR SPECIFICATIONS.

WATER REQUIRED FOR SOD AND SEEDING SHALL BE INCLUDED IN THE CONTRACT COST FOR THESE ITEMS. WATER REQUIRED FOR COMPACTION SHALL BE INCLUDED IN THE COST OF CONSTRUCTION FOR THIS PROJECT. CONTRACTOR SHALL WATER THE PLANTINGS AND SEEDED AREAS DAILY FOR A MINIMUM OF 14 DAYS WITH AN ADDITIONAL FOUR (4) WATERING EVENTS IN THE FOLLOWING TWO WEEKS AFTER THE DAILY WATERING, OR AS NECESSARY TO MAINTAIN GROWTH. WATERING SHALL NOT OCCUR ON SATURDAYS, SUNDAYS, OR IMMEDIATELY AFTER RAIN EVENTS. ALL EXCEPTIONS SHALL BE APPROVED BY THE PROJECT ENGINEER. WATER CAN BE TAKEN FROM THE RIVER FOR THE PLANTINGS. WARRANTY FOR PLANTINGS/SEED IS ONE YEAR FOLLOWING ACCEPTANCE.

ALL AREAS DISTURBED BY THE CONTRACTOR AND/OR HIS SUBCONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE RESTORED AS SPECIFIED OR DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE ALLOWED FOR THIS ACTIVITY. THIS INCLUDES RESTORATION TO ALL MATERIAL STORAGE OR STAGING AREAS.

SPRINKLER SYSTEMS SHALL NOT BE COVERED WHEN PLACING TOPSOIL AND SOD.

ALL DISTURBED AREAS TO BE RESTORED WITHIN SEVEN (7) DAYS OF COMPLETION.

CONTRACTOR TO CHECK ON SEED AND SHRUB/PLUG GROWTH & SUPPLEMENT AS NEEDED. COSTS FOR RESEEDING AND PLANTINGS TO BE INCLUDED IN THE UNIT PRICE FOR SEEDING AND SHRUB/PLUGS.

GENERAL NOTES

CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS REQUIREMENT TO WORK WITHIN THE UTILITY, ROAD, AND DRAIN RIGHT-OF-WAYS UNLESS OTHERWISE PROVIDED

CONTRACTOR SHALL CONFORM TO THE SOIL EROSION AND SEDIMENTATION CONTROL ACT, PA 451, AMENDED 2001, CITY OF ANN ARBOR STANDARDS, AND MACDOC STANDARDS

CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER IF POSSIBLE CONFLICT EXISTS.

ANY UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE IDENTIFIED AND BROUGHT TO THE ATTENTION OF THE ENGINEER

PROTECT ALL BITUMINOUS ROADS, DRIVES, OR PARKING AREAS NOT SPECIFIED TO BE REMOVED DURING CONSTRUCTION. REPAIR ANY UNAUTHORIZED DAMAGE AT CONTRACTOR'S EXPENSE.

WORK HOURS ARE 7 AM TO 7 PM MONDAY THROUGH SATURDAY. SATURDAY ACCESS WILL HAVE TO BE COORDINATED WITH SITE MANAGER. WORK ON SUNDAYS AND HOLIDAYS IS NOT PERMITTED WITHOUT OWNER APPROVAL.

ALL RIP RAP SHALL BE NATURAL TYPE MATERIAL AS APPROVED BY THE ENGINEER UNLESS OTHERWISE DIRECTED. SUBMIT SAMPLES TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. OWNER AND ENGINEER RESERVES THE RIGHT TO REJECT ANY AND ALL RIP RAP.

CONTRACTORS SHALL FINISH GRADE, SEED, FERTILIZE, AND MULCH DAILY ON ALL DISTURBED AREAS AS DESCRIBED IN THE SPECIFICATIONS. ALL AREAS TO RECEIVE LANDSCAPE SEEDING SHALL HAVE 4" TOPSOIL PLACED AS DETAILED IN THE SPECIFICATIONS. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE AS TOPSOIL SURFACE AS DIRECTED BY THE ENGINEER

UNDERGROUND UTILITIES/MISS DIG

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 OR 811 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM

PERMITS

CONTRACTOR SHALL RESTORE INCIDENTAL DAMAGES ON THE PROJECT AS DIRECTED BY OWNER AND ENGINEER

UTILITIES

ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

GRADING AROUND MANHOLES/CATCH BASINS, FLARED END SECTIONS, AND OTHER INLETS DETERMINED BY THE ENGINEER PROPERLY SHALL BE SMOOTH AND SHAPED TO PROVIDE POSITIVE DRAINAGE INTO THE INLETS.

ALL FLARED END SECTIONS UNDER 8" IN DIAMETER SHALL HAVE FACTORY SUPPLIED ANIMAL GUARD

CONSTRUCTION

TOPSOIL, RAKE, SEED, AND MULCH ALL DISTURBED GRASS AREAS. FOR FARM AREAS, REPLACE TOPSOIL, RAKE, AND FINISH GRADE. CONTRACTOR SHALL DEEP RIP ANY AREAS THAT ARE COMPACTED DUE TO CONSTRUCTION ACTIVITIES PRIOR TO PLACING TOPSOIL/COMPOST.

CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION.

CONTRACTOR SHALL COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

CONTRACTOR TO HAUL ALL WOODY DEBRIS AS PART OF DREDGING OPERATION.

THE CONTRACTOR SHALL PROTECT ALL ROADWAY AND DRIVEWAY DITCH SLOPES DURING CONSTRUCTION. COST SHALL BE INCIDENTAL TO THE PROJECT

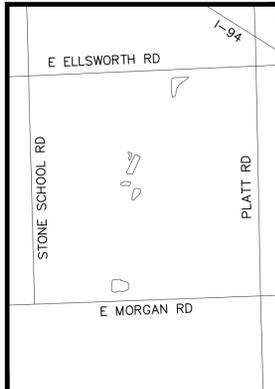
Table with columns: PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION, PERMIT, ISSUING AUTHORITY. Rows include Grading/Soil Erosion & Sedimentation Control Permit, Lane Closure Permit, Wetland Permit, etc.

NOTE: ALL PERMITS WILL BE APPLIED FOR OR ISSUED AT TIME OF BID. THERE WILL BE NO COST TO THE CONTRACTOR. CONTRACTOR MAY BE REQUIRED TO PICK UP PERMITS AND SUPPLY REQUIRED DOCUMENTATION UPON ISSUANCE OF PERMITS.



HRC Hubbell, Roth & Clark, Inc Consulting Engineers Since 1915. 555 HULET DRIVE BLOOMFIELD HILLS, MICH. P.O. BOX 824 48303 - 0824

Revision table with columns: DATE, ADDITIONS AND/OR REVISIONS. Rows include 02/08/21 SECOND CITY REVIEW, 09/24/20 ISSUED TO CITY FOR PERMITS, 06/18/20 DRAFT PLANS.



WHEELER FACILITY POND DREDGING

Project Notes table with columns: HRC JOB NO., SCALE, DATE, SHEET NO. Values: 20190818, NTS, April 2020, A.

SEED MIX A

SPECIES	COMMON NAME	RATE (LBS./AC.)
Agrostis alba palustris	Bent Grass	6.000
Alisma subcordatum	Common Water Plantain	0.375
Asclepias incarnata	Swamp Milkweed	0.062
Aster nova-angliae	New England Aster	0.062
Aster simplex	Panicled Aster	0.031
Bidens cernua	Nodding Bur Marigold	0.312
Bidens frondosa	Common Beggar's Tick	0.125
Boltonia latifolia	False Aster	0.188
Carex bebbii	Bebb's Sedge	0.125
Carex comosa	Bottlebrush Grass	0.125
Carex lupuliformis	Knobbed Hop Sedge	0.062
Carex stipata	Awl-fruited Sedge	0.125
Carex scoparia	Pointed Broom Sedge	0.125
Carex vulpinoidea	Fox Sedge	0.500
Eleocharis species	Spike Rush Species	0.062
Elymus virginicus	Virginia Wild Rye	1.500
Eupatorium maculatum	Spotted Joe Pye Weed	0.125
Glyceria striata	Fowl Manna Grass	0.125
Helenium autumnale	Sneezeweed	0.250
Iris virginica	Southern Blue Flag	0.188
Juncus species	Rush Species	0.062
Leersia oryzoides	Rice Cut Grass	0.188
Ludwigia polycarpa	False Loosestrife	0.001
Mimulus ringens	Monkeyflower	0.031
Onoclea sensibilis	Sensitive Fern	0.031
Penthorum sedoides	Ditch Stonecrop	0.001
Polygonum hydropiperoides	Mild Water Pepper	0.750
Rudbeckia laciniata	Green Coneflower	0.125
Sagittaria latifolia	Duck Potato	0.062
Scirpus atrovirens	Dark Green Rush	1.250
Scirpus fluviatilis	River Bulrush	0.125
Scirpus pendulus	Red Bulrush	0.031
Scirpus validus	Soft Stem Bulrush	0.031
Sparganium eurycarpum	Common Bur-Reed	0.062
Veronica fasciculata	Common Ironweed	0.062
Verbena hastata	Blue Vervain	0.125
TOTAL:		13.404

SPECIES	COMMON NAME	RATE (25 LBS./AC.)
Cover Crop		
Avena sativa	Seed Oats	33%
Agrostis gigantes	Red Top Grass	33%
Lolium multiflorum	Annual Rye	33%

NOTES:
Seed mix to be broadcast over the wetland creation and enhancement areas as indicated on the plans.

This is Geneisi Nursery's Sedge Ghetto--The Next Generation seed mix modified for use in Michigan.

A total of 109.91 pounds needed for ± 8.20 acres of wetland mitigation and enhancement.

Paid for as "Seed Mix A" per acre.

SEED MIX B

SPECIES	COMMON NAME	RATE (LBS./AC.)
Andropogon scoparius	Little Bluestem	3.000
Avena sativa	Seed Oats	20.000
Elymus virginicus	Virginia Wild Rye	1.000
Asclepias syriaca	Common Milkweed	0.063
Aster ericoides	Heath Aster	0.031
Aster nova-angliae	New England Aster	0.250
Desmodium canadense	Showy Tick Trefoil	0.031
Echinacea pallida	Pale Purple Coneflower	0.063
Echinacea purpurea	Purple Coneflower	0.375
Heliopsis helianthodes	False Sunflower	0.125
Lespedeza capitata	Roundheaded Bush Clover	0.125
Liatriis spicata	Spiked Gayfeather	0.125
Monarda fistulosa	Bergamot	0.031
Parthenium integrifolium	Wild Quinine	0.375
Penstemon digitalis	Foxglove Beardtongue	0.063
Petalostemum purpureum	Purple Prairie Clover	0.250
Ratibida pinnata	Yellow Coneflower	0.250
Rudbeckia hirta	Black-eyed Susan	0.375
Rudbeckia subtomentosa	Sweet Coneflower	0.063
Solidago rigida	Rigid Goldenrod	0.375
TOTAL:		26.970

NOTE:
Seed mix to be broadcast over upland areas for meadow. This is Genesis Nursery's Lo pro prairie for clay soils.

SPECIES	COMMON NAME	RATE (LBS./AC.)
Bromus latiglumis	Ear-Leafed Brome	0.125
Bromus pubescense	Woodland Brome	0.031
Elymus canadensis	Canada Wild Rye	1.000
Glyceria striata	Fowl Manna Grass	0.062
Hystrix patula	Bottlebrush Grass	0.062
Anemone virginiana	Tall anemone	0.031
Aquilegia canadensis	Columbine	0.006
Aster drummondii	Drummond's Aster	0.031
Aster lateriflorus	Side-flowering Aster	0.031
Aster sagittifolius	Arrow-leafed Aster	0.062
Clematis virginiana	Virgin's Bower	0.031
Pycnanthemum pilosum	Hairy Mt. Mint	0.016
Smilacina racemosa	Feathery False Solomon's Seal	0.016
Solidago flexicaulis	Zig Zag Goldenrod	0.031
Solidago juncea	Early Goldenrod	0.031
TOTAL:		1.566

SPECIES	COMMON NAME	RATE (25 LBS./AC.)
Cover Crop		
Avena sativa	Seed Oats	33%
Agrostis gigantes	Red Top Grass	33%
Lolium multiflorum	Annual Rye	33%

NOTES:
Seed mix to be broadcast over woodland edges and interior areas with thin canopy. This is Genesis Nursery's Mesic to Dry Open Woodland seed mix.

Seed mix to be covered with North American Green C125bn erosion control blanket or equivalent installed in compliance with manufacturer's specifications on all slope areas exceeding 1 on 3. No plastic shall be used.

Paid for as "Seed Mix B" per acre.

SEED MIX C

SPECIES	COMMERCIAL NAME	RATE (LBS./AC.)
Turf type tall fescue	Rebel, Apache or equal	250
Perennial rye grass	K-31, Pennington or equal	250
Kentucky bluegrass	Glade, Palmer II or equal	250
TOTAL:		750

NOTES:
Seed mix to be covered with North American Green C125bn erosion control blanket or equivalent installed in compliance with manufacturer's specifications on all slope areas exceeding 1 on 3.

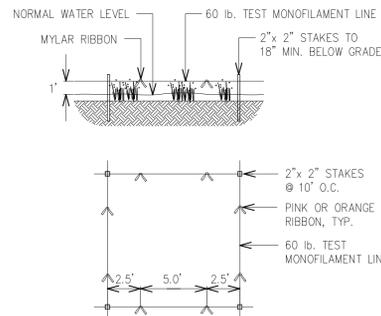
Seed mix to be broadcast over all lawn areas disturbed by construction activities not specifically designated to be seeded by another mix specified on the sheet or on the plans.

Paid for as "Seed Mix C" per acre

WETLAND PLANTS

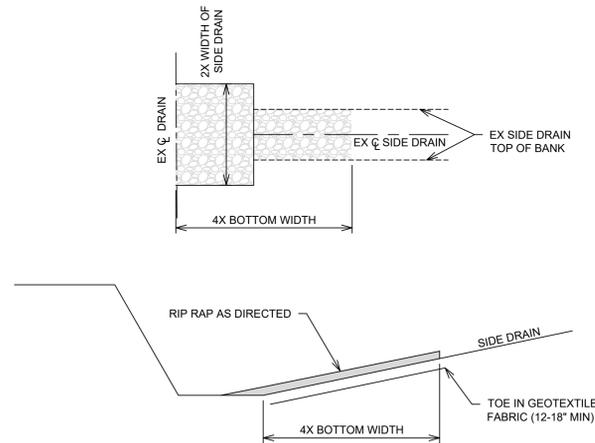
SPECIES	COMMON NAME	QUANTITY	SIZE
Acorus calamus	Sweet Flag	75 / 100 sft	Tuber or Plant Plugs
Iris versicolor	Blue Flag	75 / 100 sft	Tuber or Plant Plugs
Juncus effusus	Soft-Stemmed Rush	75 / 100 sft	Tuber or Plant Plugs
Nymphaea tuberosa	Sweet-Scented Waterlily	75 / 100 sft	Tuber or Plant Plugs
Peltandra virginica	Arrow-Arum	75 / 100 sft	Tuber or Plant Plugs
Polygonum amphibium	Water Smartweed	75 / 100 sft	Tuber or Plant Plugs
Pontederia cordata	Pickelweed	75 / 100 sft	Tuber or Plant Plugs
Sagittaria latifolia	Common Arrowhead	75 / 100 sft	Tuber or Plant Plugs
Schoenoplectus acutus	Bulrush	75 / 100 sft	Tuber or Plant Plugs
Scirpus cyperinus	Wool-Grass	75 / 100 sft	Tuber or Plant Plugs
Sparganium americanum	American Bur-Reed	75 / 100 sft	Tuber or Plant Plugs
Sparganium eurycarpum	Common Bur-Reed	75 / 100 sft	Tuber or Plant Plugs
Scirpus americanus	3 Square Bulrush	75 / 100 sft	Tuber or Plant Plugs

NOTE:
Plant Zone D species in group of 25 plants of any three species within each 100 sft planting zone having 3 different species each.



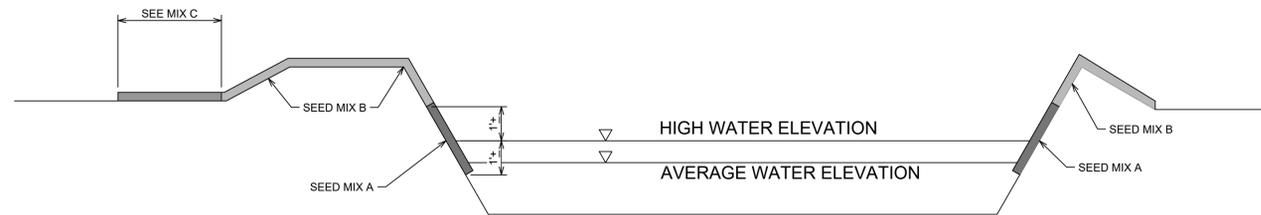
- NOTES:
1. STAGGER MONOFILAMENT LINE HEIGHT AT 6" AND 12" ABOVE WATER LEVEL IN PERPENDICULAR DIRECTIONS ACROSS GRID.
 2. EXTEND GRID 2.5' MIN. BEYOND VEGETATION TO BE PROTECTED
 3. TO INSTALLED W/ SHRUB OR PLUG PLANTS AND PAID AS INCIDENTAL TO SHRUB/PLUG PAY ITEM

GOOSE GRID DETAIL
NTS



NOTE: ROCK LEVEL SPREADER IS PAID FOR BY TON OF ROCK PLACED

ROCK LEVEL
SPREADER DETAIL
NTS



NOTE: BLANKET (NAG C125bn) ON ALL SEEDED AREAS. PAID FOR AS PART OF "SEED MIX" COST.

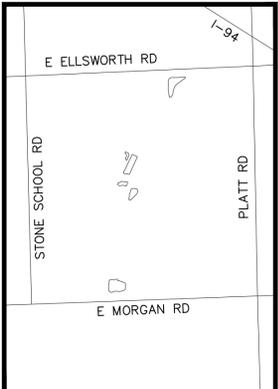
CONTRACTOR TO MANAGE WATER ELEVATION TO FACILITATE SEED GROWTH.

TYPICAL SEEDING MIX
NTS



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DATE	ADDITIONS AND/OR REVISIONS
02/08/21	SECOND CITY REVIEW
09/24/20	ISSUED TO CITY FOR PERMITS
06/18/20	DRAFT PLANS
DESIGNED	D.HURRISH
DRAWN	D.HURRISH
CHECKED	J.BALINT, A.GROAT
APPROVED	J.BALINT, A.GROAT



WHEELER FACILITY POND DREDGING

PROJECT DETAILS

HRC JOB NO. 20190818	SCALE NTS
DATE April 2020	SHEET NO. B

SILT SOCK INSTALLATION GUIDELINES

SLOPE INTERRUPTION

1. A SLOUGH ENTRENCHMENT MAY BE REQUIRED ON STEEPER SLOPES TO ENSURE INTIMATE GROUND CONTACT.
 2. REMOVE SEDIMENT FROM THE UP-SLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF EFFECTIVE HEIGHT OF SOCK.
 3. LOOSE FILTER MEDIA MAY BE BACKFILLED ON THE UP-SLOPE SIDE OF SOCK TO ENHANCE PERFORMANCE.
 4. HARDWOOD STAKES (2-4" DIA. MINIMUM) ARE SUGGESTED.

DITCH CHECK

INSTALL SILT SOCK PERPENDICULAR TO FLOW WITH ENDS CURLED SLIGHTLY UPSTREAM TO PREVENT HIGH WATER FROM GOING AROUND THE ENDS. SLOW AND SPREAD WATER TO REDUCE CHANNELING AND EROSION.

PERIMETER CONTROL & OVERLAPPING

PYRAMID INSTALLATION STAKING

INLET PROTECTION

STAKE OR SANDBAG

Manufacturing or Installation Support By:

Silt Sock

EROSION CONTROL PRODUCTS

info@siltsock.net
608-438-7625

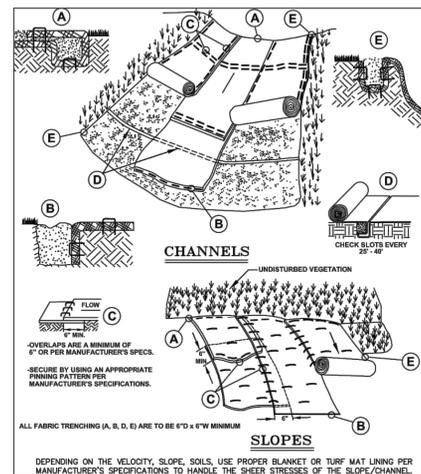
1. THESE GUIDELINES ARE BASED UPON MANUFACTURERS RECOMMENDATIONS. PROJECT SPECIFICATIONS MAY SUPERSEDE THESE GUIDELINES.
 2. REFER TO REGULATORY AUTHORITY OR PROJECT ENGINEER FOR DETAILED INSTALLATION PROCEDURES.
 3. WOOD FILLER MATERIAL IS PROPERLY SIZED, BIODEGRADABLE, WEED-, SEED & DISEASE FREE AND ENVIRONMENTALLY SOUND.

NOTE: PAID FOR AS "SILT SOCK/EROSION CONTROL FENCING" PER LINEAR FOOT

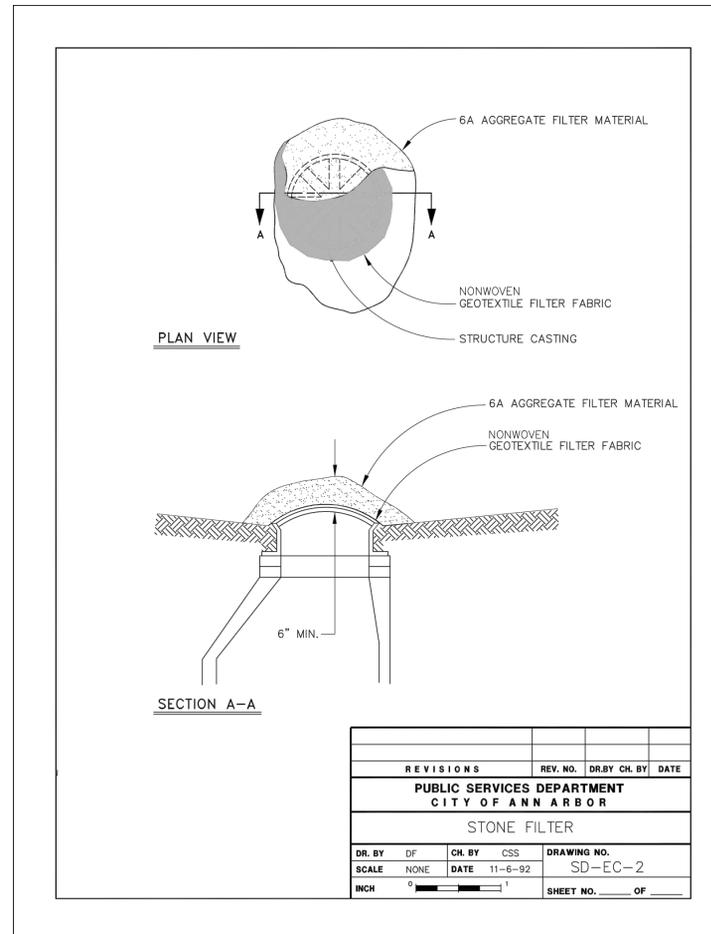
SEQUENCE OF CONSTRUCTION - SOIL EROSION CONTROL

1. THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO COMMENCEMENT OF DREDGING OPERATIONS. MEASURES TO BE INSTALLED AS DIRECTED ON PERMITS FROM CITY OF ANN ARBOR AND PITTSFIELD TOWNSHIP.
2. STRIP AND STOCKPILE TOPSOIL IN DESIGNATED STAGING AREAS. PLAN SHEETS DESIGNATE MAXIMUM AREA OF DISTURBANCE. EFFORTS SHALL BE MADE TO MINIMIZE DISTURBANCE.
3. BEGIN DREDGING OPERATION
4. CHECK AND MAINTAIN SOIL EROSION CONTROL MEASURES DAILY. ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND THE AREA IS STABILIZED.
5. COMPLETE CONSTRUCTION.
6. RESTORE ALL DISTURBED AREAS AS SPECIFIED HEREIN. PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED AREA SHALL BE INSTALLED WITHIN FIVE (5) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED.
7. CONTRACTOR TO MAINTAIN TEMPORARY SEDIMENT CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT UNTIL GRASS IS ESTABLISHED, THEN THE CONTRACTOR IS TO REMOVE THEM.

SOIL EROSION CONTROL MEASURES ARE ITEMIZED AND WILL BE PAID FOR BY UNIT/FT ETC.. QUANTITIES ARE ESTIMATED AND MAY BE MORE OR LESS THAN WHAT IS SHOWN ON PLANS.



NOTE: PAID FOR AS "EROSION BLANKET" PER SF
EROSION BLANKET DETAIL
 NTS

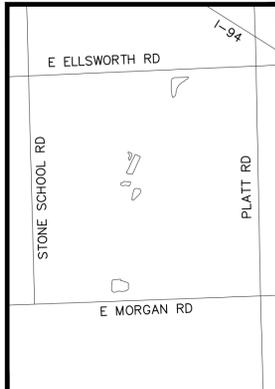


NOTE: PAID FOR AS "STONE FILTER, COMPLETE" AS EACH



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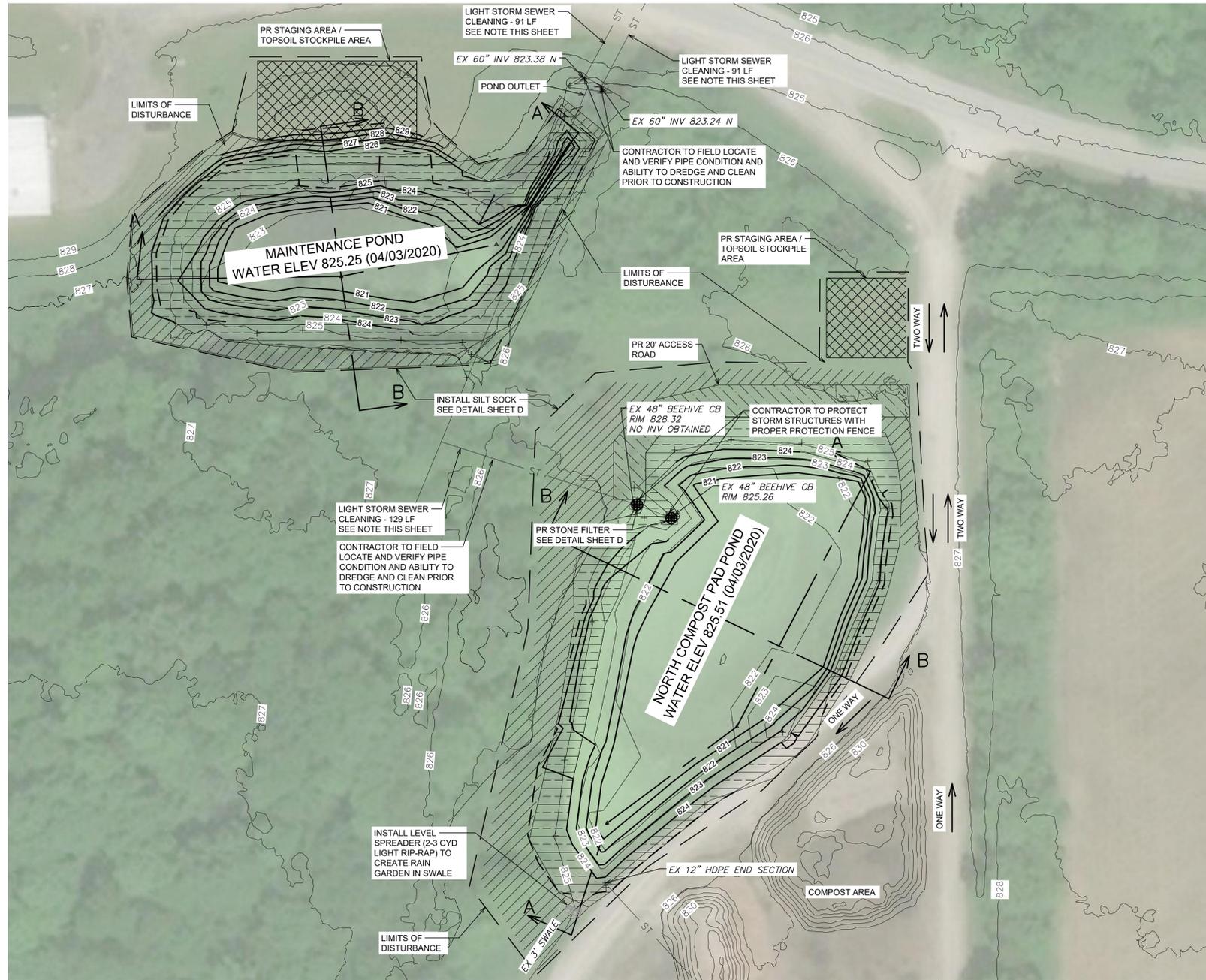
02/08/21	SECOND CITY REVIEW
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DRAWN	D.HURRISH
CHECKED	J.BALINT, A.GROAT
APPROVED	J.BALINT, A.GROAT



WHEELER FACILITY POND DREDGING

SOIL EROSION & SEDIMENT CONTROL DETAILS

HRC JOB NO. 20190818	SCALE NTS
DATE April 2020	SHEET NO. D



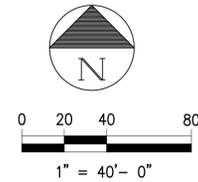
NORTH COMPOST PAD POND		
QUANTITIES		
Item	Unit	Quantity
Sediment Removal and Earth Excavation	CY	900
Stone Filter	EA	2
Seed Mix A	AC	0.30
Seed Mix B	AC	0.34
Seed Mix C	AC	0.10
Erosion Blanket	SF	32300
Light Storm Sewer Cleaning (30" - 60")	LF	129
Silt Sock	LF	1250
Strip and Stockpile Topsoil	SY	2,130

MAINTENANCE POND		
QUANTITIES		
Item	Unit	Quantity
Sediment Removal and Earth Excavation	CY	800
Seed Mix A	AC	0.42
Seed Mix B	AC	0.16
Erosion Blanket	SF	25300
Light Storm Sewer Cleaning (30" - 60")	LF	182
Silt Sock	LF	880
Strip and Stockpile Topsoil	SY	774
Level Spreader Rip-Rap	CY	3

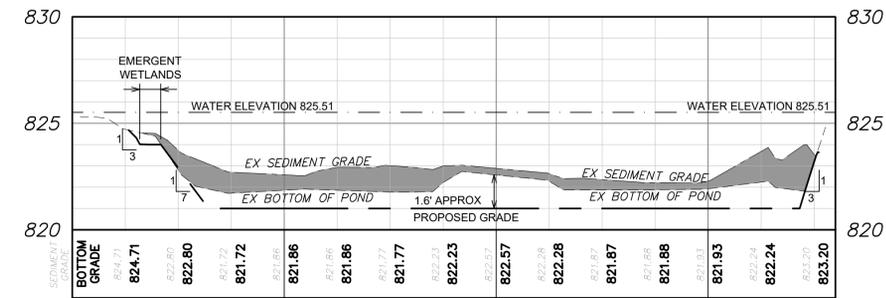
NORTH COMPOST PAD POND
 POND AREA: 28,900 SF
 AVG SEDIMENT DEPTH: 0.57 FT
 EX POND VOLUME: 2,300 CY
 PR POND VOLUME: 3,200 CY
 AREA OF DISTURBANCE: 74,500 SF

MAINTENANCE POND
 POND AREA: 16,380 SF
 AVG SEDIMENT DEPTH: 0.55 FT
 EX POND VOLUME: 300 CY
 PR POND VOLUME: 1,100 CY
 AREA OF DISTURBANCE: 37,300 SF

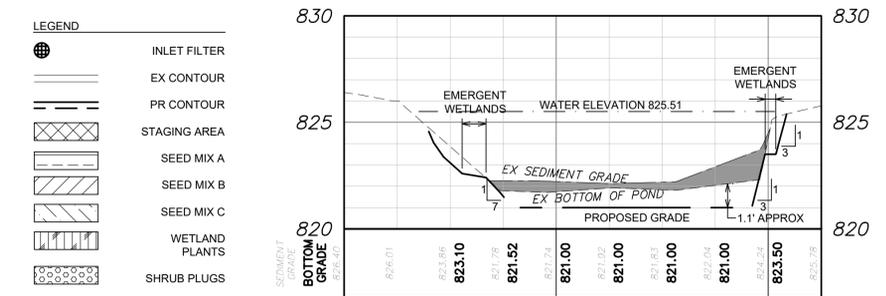
- NOTE:
- EXISTING AERATORS WILL BE REMOVED FROM PONDS BY FACILITY STAFF
 - CONTRACTOR WILL REMOVE PHARMGMITES AS PART OF DREDGING OPERATION AND DISPOSE OF WITH DREDGED MATERIAL
 - CONCRETE PADS FOR SOLAR PANELS WILL NEED TO BE RELOCATED BY CONTRACTOR AS NECESSARY. FACILITY STAFF WILL ADDRESS SOLAR PANELS DIRECTLY
 - MISS DIG STAKING SHALL BE WITNESSED BY CONTRACTOR
 - STORM SEWER TO BE CLEANED AS NOTED ON PLAN. SEE SPECIFICATIONS FOR REQUIREMENTS
 - CONTRACTOR TO MANAGE WATER ELEVATION TO FACILITATE SEED GROWTH
 - CONTRACTOR TO MAINTAIN TRAFFIC ENTERING AND EXITING COMPOST FACILITY.



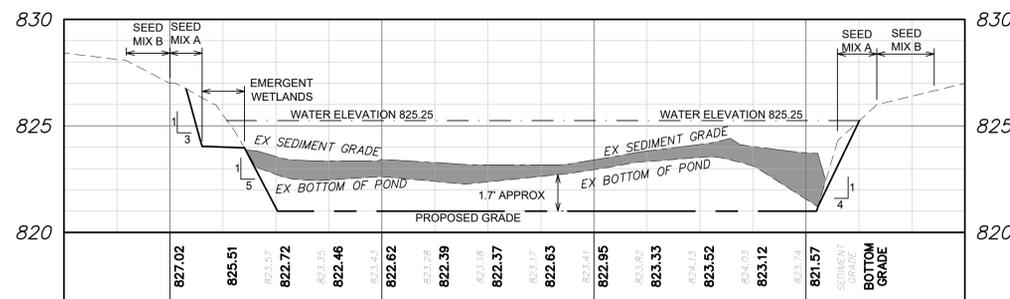
HRC
HUBBELL, ROTH & CLARK, INC
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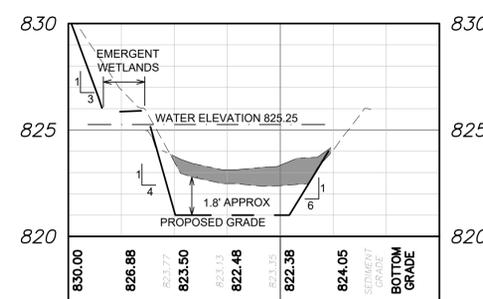
NORTH COMPOST PAD POND A-A



NORTH COMPOST PAD POND B-B



MAINTENANCE POND A-A



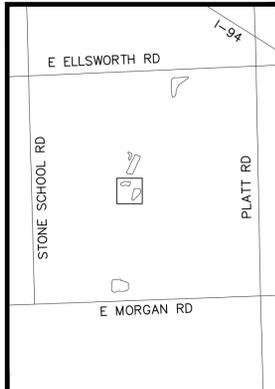
MAINTENANCE POND B-B



CALL MISS DIG
72 HOURS
(3 WORKING DAYS)
BEFORE YOU DIG
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OR 811
(TOLL FREE)

Know what's below
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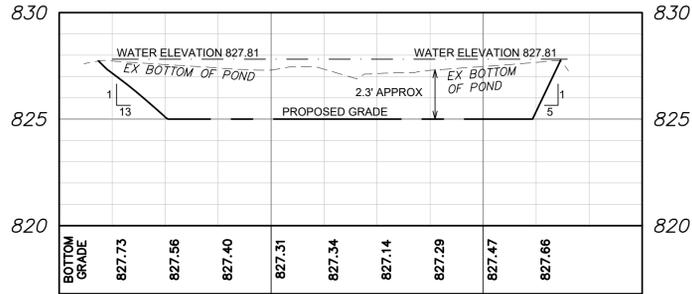
02/08/21	SECOND CITY REVIEW
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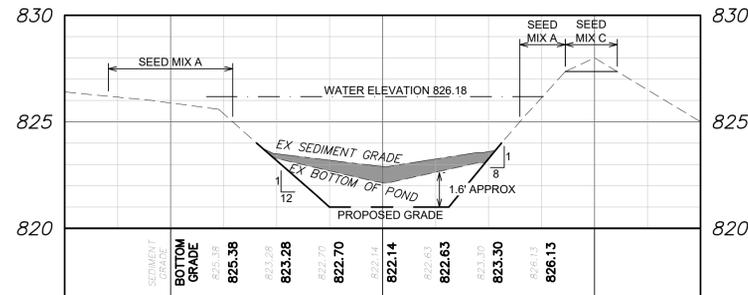
WHEELER FACILITY
POND DREDGING

NORTH COMPOST PAD POND
& MAINTENANCE POND

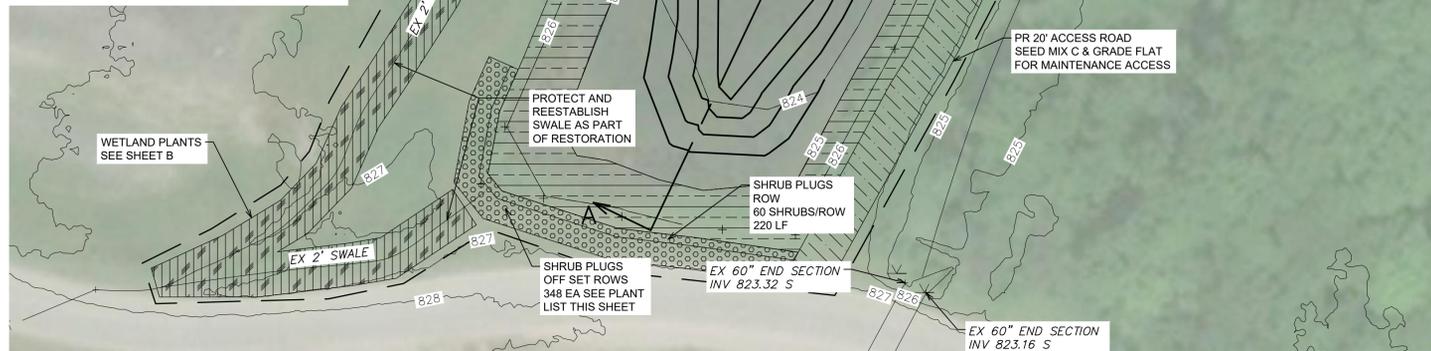
HRC JOB NO. 20190818	SCALE H: 1"=40' V: 1"=4'
DATE April 2020	SHEET NO. 3



FOREBAY A-A

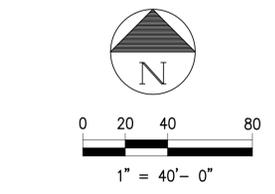


TRANSFER STATION POND B-B



FOREBAY QUANTITIES		
Item	Unit	Quantity
Sediment Removal and Earth Excavation	CY	500
Stone Filter	EA	1
Live Stake Shrub Plug	EA	120
Seed Mix A	AC	0.07
Seed Mix B	AC	0.30
Seed Mix C	AC	0.15
Erosion Blanket	SF	22333
Light Storm Sewer Cleaning (12" - 24")	LF	51
Silt Sock	LF	640
Strip and Stockpile Topsoil	SY	2,178

TRANSFER STATION POND QUANTITIES		
Item	Unit	Quantity
Sediment Removal and Earth Excavation	CY	2300
Stone Filter	EA	1
Live Stake Shrub Plug	EA	348
Seed Mix A	AC	0.45
Seed Mix B	AC	0.05
Seed Mix C	AC	0.16
Erosion Blanket	SF	29000
Light Storm Sewer Cleaning (12" - 24")	LF	52
Silt Sock	LF	1420
Strip and Stockpile Topsoil	SY	1,016



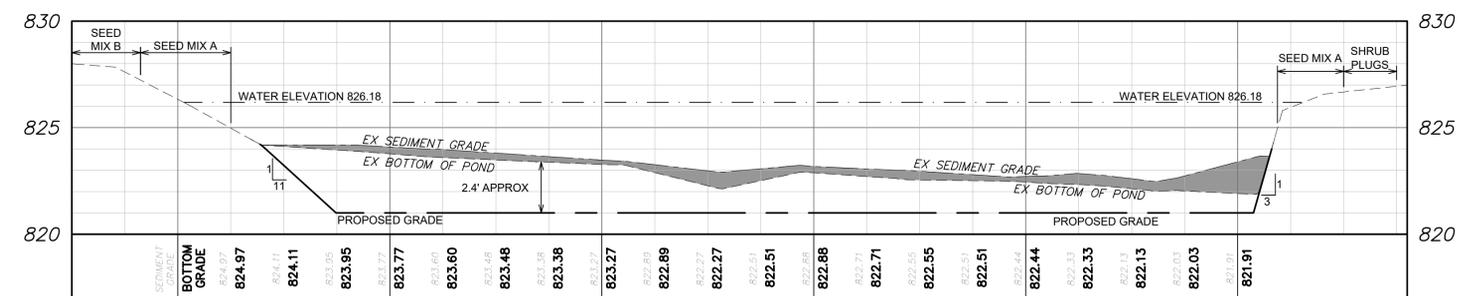
- LEGEND**
- INLET FILTER
 - EX CONTOUR
 - PR CONTOUR
 - STAGING AREA
 - SEED MIX A
 - SEED MIX B
 - SEED MIX C
 - WETLAND PLANTS
 - SHRUB PLUGS

FOREBAY
 POND AREA: 8,720 SF
 EX POND VOLUME: 25 CY
 PR POND VOLUME: 525 CY
 AREA OF DISTURBANCE: 42,000 SF

TRANSFER POND
 POND AREA: 47,550 SF
 AVG SEDIMENT DEPTH: 0.36 FT
 EX POND VOLUME: 1,400 CY
 PR POND VOLUME: 3,700 CY
 AREA OF DISTURBANCE: 128,200 SF

- NOTE:**
- EXISTING AERATORS WILL BE REMOVED FROM PONDS BY FACILITY STAFF
 - CONTRACTOR WILL REMOVE PHARMGMITES AS PART OF DREDGING OPERATION AND DISPOSE OF WITH DREDGED MATERIAL
 - MISS DIG STAKING SHALL BE WITNESSED BY CONTRACTOR
 - STORM SEWER TO BE CLEANED AS NOTED ON PLAN. SEE SPECIFICATIONS FOR REQUIREMENTS
 - CONTRACTOR TO MANAGE WATER ELEVATION TO FACILITATE SEED GROWTH

- SHRUB PLANT LIST:**
- | | | |
|-----------|-------|---|
| 117 PLUGS | 1 GAL | ARONIA ARBUTIFOLIA - RED CHOKEBERRY |
| 117 PLUGS | 1 GAL | PHYSOCAMPUS OPULIFOLIUS - COMMON NINEBARK |
| 117 PLUGS | 1 GAL | VIBURNUM DENTATUM - ARROWWOOD VIBURNUM |
| 117 PLUGS | 1 GAL | POTENTILLA FRUCTICUS - SHRUBBY CINQUEFOIL |



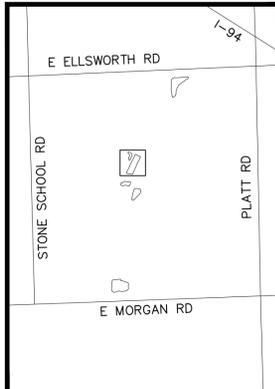
TRANSFER STATION POND A-A

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 BEFORE YOU DIG
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**WHEELER FACILITY
 POND DREDGING**

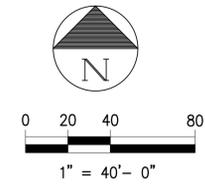
**FOREBAY AND
 TRANSFER STATION
 POND**

HRC JOB NO.	20190818	SCALE	H: 1"=40' V: 1"=4'
DATE	April 2020	SHEET NO.	4



LEGEND

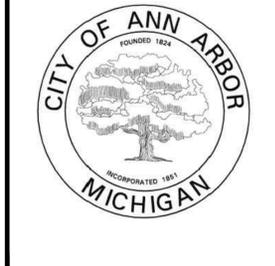
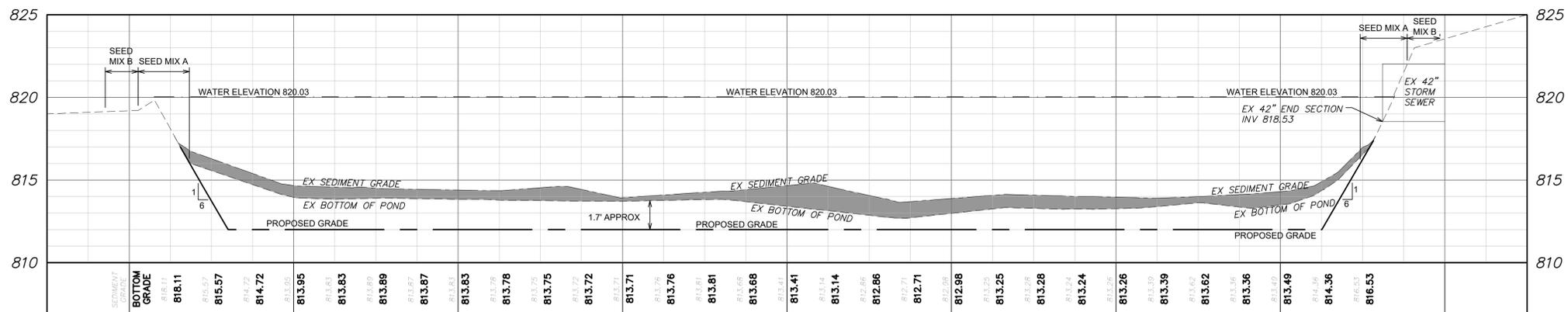
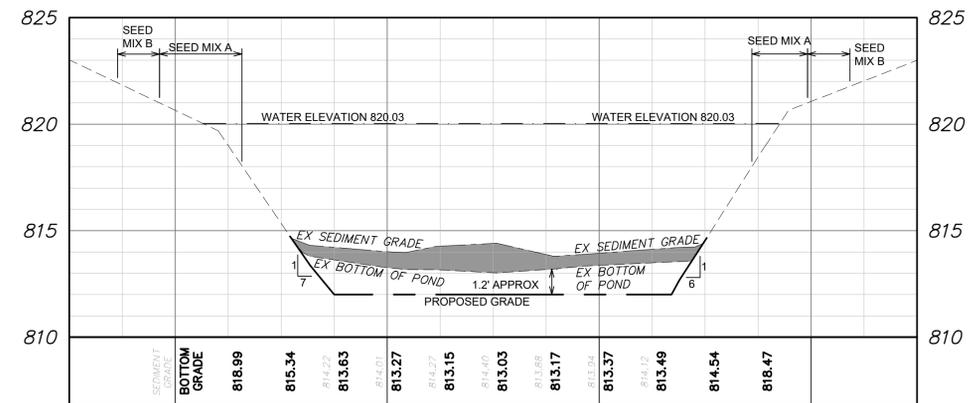
- INLET FILTER
- EX CONTOUR
- PR CONTOUR
- STAGING AREA
- SEED MIX A
- SEED MIX B
- SEED MIX C
- WETLAND PLANTS
- SHRUB PLUGS



LANDFILL POND QUANTITIES		
Item	Unit	Quantity
Sediment Removal and Earth Excavation	CY	3800
Seed Mix A	AC	1.68
Seed Mix B	AC	0.82
Light Storm Sewer Cleaning	LF	106
Erosion Blanket	SF	108780
Silt Sock	LF	2150
Strip and Stockpile Topsoil	SY	3,969

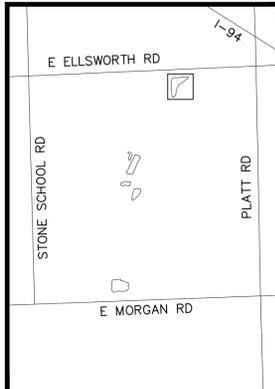
LANDFILL POND
 POND AREA: 68,315 SF
 AVG SEDIMENT DEPTH: 0.58 FT
 EX POND VOLUME: 15,000 CY
 PR POND VOLUME: 18,800 CY
 AREA OF DISTURBANCE: 185,000 SF

- NOTE:**
- EXISTING AERATORS WILL BE REMOVED FROM PONDS BY FACILITY STAFF
 - CONTRACTOR WILL REMOVE PHARMGMITES AS PART OF DREDGING OPERATION AND DISPOSE OF WITH DREDGED MATERIAL
 - MISS DIG STAKING SHALL BE WITNESSED BY CONTRACTOR
 - STORM SEWER TO BE CLEANED AS NOTED ON PLAN. SEE SPECIFICATIONS FOR REQUIREMENTS
 - CONTRACTOR TO MANAGE WATER ELEVATION TO FACILITATE SEED GROWTH



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APPROVED	J.BALINT, A.GROAT



WHEELER FACILITY POND DREDGING

LANDFILL POND

HRC JOB NO. 20190818	SCALE H: 1"=40' V: 1"=4'
DATE April 2020	SHEET NO. 5

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