Oakton College District 535

Procurement Department, Room 1240
1600 E. Golf Rd., Des Plaines, IL 60016
847-635-1635

Invitation to Bid # 0811-23-01 – Addendum #1
Issue Date: August 11, 2023

Pre-Bid Meeting Date: 10:00 AM on Thursday, August 17, 2023

Bids will be received in the Procurement Office at the above address until
11:00 AM on Friday, September 1, 2023
Bids will be publicly opened at this time. Late bids will not be accepted.

Landscaping at Various Sites

The College is accepting bids for the renovation of the landscape at both their Des Plaines and Skokie Campuses.

This bid consists of 3 documents:

1) Landscaping Bid - Business Specifications (this document)
2) OCC Landscaping Specifications
3) OCC Landscaping Drawings

A Non-Mandatory pre-bid meeting will be held on Thursday, August 17th 2023, starting at 10:00 am at the College's Des Plaines campus, 1600 E. Golf Road, Room 1275.

Any questions regarding this bid must be submitted in writing via email by 11:00 am on August 23, 2023. All questions will be answered through an addendum and must be submitted to the following individuals:

Joe Scifo, Director of Facilities, jscifo@oakton.edu
Rich Schwass, Construction Manager at rschwass@oakton.edu
Jason Cooper, Environmental Consulting & Technology, Inc. (ECT) at jacooper@ectinc.com
Trinh Than, Purchasing Manager at tthan@oakton.edu

Oakton College District 535 is exempt from all Federal, State, and Municipal Taxes.

I have examined the specifications and instructions included herein and agree, provided I am awarded a contract within 60 days of the bid due date, to provide the specified items for the sum shown in accordance with the terms stated herein. All deviations from the specifications and terms are in writing and attached hereto. I offer the following discount terms _____

Company Name: _____ Date: _____

Address: _____ City/St/Zip: _____

Name: _____ Title: _____

Phone #: _____ Fax #: _____

Signature: _____ E-mail:_____

ADDENDUM NO. 01

LANDSCAPING AT VARIOUS SITES
Oakton College District 535
Invitation to Bid # 0331-23-09
Addendum Issue Date: August 25, 2023

For which Bids have been scheduled to be opened at the Procurement office at 1600 E. Golf Rd., Des Plaines, IL 60016 at 11:00AM on Friday, September 1, 2023.

PROPOSER WILL ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE BID FORMS.

ITEM NO. DESCRIPTION OF CHANGE/CLARIFICATION

GENERAL

1. Clarification: It will be the responsibility of the contractor to coordinate all public and private utility locate services prior to digging on the site.
2. Clarification: There are two (2) soil mixes that will be used on the project, item #48 "Bioretention Soil Mix" and Item #49 "Topsoil Import and Placement."
    a. Bioretention Soil is specified in Section 312000 "Earth Moving". Testing of this product is required per part 1.5.B.2 to confirm that it meets the requirements of part 2.1.H.2 prior to procuring and delivering this material to the site.
    b. Topsoil is specified in Section 329300 "Exterior Planting". Testing of this product is required per part 1.5.D to confirm that it meets the requirements of part 2.4.D prior to procuring and delivering this material to the site.

BID FORMS

1. An updated Schedule of Quantities is provided which includes:
    a. Item #3 "Tree Pruning for trees to remain" is changed to reduce quantity by 1 tree to 3.
    b. Item #5 "Remove Tree and Grind Stump" is changed to increase quantity by 1 tree to 47.

TECHNICAL SPECIFICATIONS

1. Specification 31 10 00 "Site Clearing"
    a. A note is added to part 3.6 "Clearing and Grubbing (Woody Vegetation)"

that reads, “Remove any memorial signage from the trunks or at the base of existing trees to be removed and return to the College prior to tree removal activities.”

2. Specification 31 20 00 “Earth Moving”
    a. Section 1.6, part A.1 is changed to read “The Contractor will engage a soil testing and inspection service, to include testing soil materials proposed for use in the Work and initial quality control testing during earthwork operations.

DRAWING SHEETS

1. C1.11 “Demolition Plan”
    a. Treatment of an existing ash tree is changed from “pruning” to “removal.”
    b. Note #6 is added which reads, “Contractor responsible for protecting pond from airborne dust and debris resulting from wall removal activities. Contractor shall employ all reasonable measures (i.e. wet saws, dust control fabric, vacuums, etc.) To prevent concrete dust from getting into the pond.”
2. L3.12 “Irrigation Plan” and IR2 “Irrigation Design”
    a. Irrigation for Zone A8 in the lower courtyard is removed. The irrigation system shall terminate just prior to the courtyard wall at the quick coupler valve.
3. IR1, IR2, and IR 3
    a. Clarification: The symbol for the Pipe Sleeves on the plans is a thick, continuous, gray line, not a thick, dashed, gray line as shown in the legend.
    b. Clarification: There is not an alternate irrigation design or schedule of quantities. The quantities shown under the table “Irrigation Schedule Alternate Bid” should be included in the base bid along with the quantities listed under the table “Irrigation Schedule Campus.”

Oakton Community College, Landscaping at Various Sites

Contractor is required to guarantee bid pricing until project completion.

Schedule of Quantities

	Description	Qty.[1]	Unit	Unit Price[2]	Extension[3]
	A. Demolition & Site Prep (C1)				
1	Mobilization, Site Protection, Cleaning	1	LS		
2	Plant Protection Fence	125	LF		
3	**Tree pruning for trees to remain**	**3**	**EA**		
4	Excavate and remove existing CCDD soil	331	CY		
5	**Remove Tree and Grind Stump**	**47**	**EA**		
6	Remove/Grind Stump	5	EA		
7	Remove Turfgrass	9683	SF		
8	Remove Shrubs and Perennials	13786	SF		
9	Remove Concrete Paving and Base	3200	SF		
10	Remove Gravel Surfacing and Base	833	SF		
11	Remove Detectable tiles and base	675	SF		
12	Remove Asphalt Paving	3013	SF		
13	Remove Masonry Wall above concrete foundation	116	LF		
14	Remove Concrete Retaining Wall & Guardrail (at Door #5)	66	LF		
15	Remove Concrete Retaining Wall (at Pond)	107	LF		
16	Remove wall mounted handrail / patch masonry	1	LS		
17	Remove bench, footings, and stone paving	4	EA		
18	Remove existing pipe guardrail	100	LF		
19	Remove and dispose of Fence and Footings	967	LF		
20	Remove and dispose of Rip Rap at Skokie Parking Lot	7147	SF		
21	Concrete Wall Repair (at Door #5)	1	LS		
22	Relocate Existing Sculpture	1	LS		
23	Remove area drain by Door #5 and abandon sewer in place	1	LS		
	B. Erosion Contorl - SWPPP (C2)				
24	Outlet Protection - Straw Bales	1	LS		
25	Erosion Control Blanket	806	SY		
	C. Landscape Plan (L1, L2)				
26	Handrails	106	LF		
27	Guardrail	207	LF		
28	Gabion Basket Seatwall Planter	2	EA		
29	Bench	7	EA		
30	Asphalt patch/repair	111	SY		
31	Crosswalk Striping	1	LS		
32	Curb Ramp - Type A	1	EA		
33	Curb Ramp - Type B	2	EA		
34	Concrete Paving (5 inch) w/ thickened curb edge	1621	SF		
35	Concrete Paving (8 inch) w/ Base, reinforced	1410	SF		
36	Concrete Paving (5 inch) w/ Base	1039	SF		
37	Detectable Warning Tile (2x2 Ductile Iron)	336	LF		
38	Acid wash and seal existing concrete	1	LS		
39	Repair/Reset Existing Unit Pavers	1	LS		
40	Brussels Block Paving	586	SF		
41	Masonry Wall Repair: Brick Veneer	1	LS		
42	Cast Stone Wall Cap	128	LF		
43	Relocate bike rack	1	LS		
44	Uncover and repair 8"/10" outlet pipe	3	EA		
45	Lower rim of sanitary manhole	1	LS		

46	Wire Mesh Fence (6' height)	955	LF		
47	New Area Drain by Door #5, 16.6' of PVC Sewer, Splashpad	1	LS		
48	Bioretention Soil Mix	444	CY		
49	Topsoil Import and Placement	269	CY		
50	Topsoil backfill amendment for shrub/perennial planting (compost @ 10 cy/1,000sf)	146	CY		
51	Topsoil backfill amendment for shrub/perennial planting (sand @ 5 cy/1,000sf)	73	CY		
52	Turfgrass Sod	856	SY		
53	Acer x freemanii 'Autumn Blaze'	9	EA		
54	Celtis occidentalis 'Prairie Pride'	3	EA		
55	Quercus alba	2	EA		
56	Quercus bicolor	1	EA		
57	Quercus macrocarpa	2	EA		
58	Quercus rubra	6	EA		
59	Tilia americana 'Redmond'	8	EA		
60	Amelanchier laevis	3	EA		
61	Amelanchier x grandifolia 'Autumn Brilliance'	2	EA		
62	Carpinus caroliniana	1	EA		
63	Cercis canadensis	2	EA		
64	Chionanthus virginicus	1	EA		
65	Cornus florida	3	EA		
66	Crataegus crus-galli var inermis	3	EA		
67	Hammamelis x intermedia 'Arnold's Promise	3	EA		
68	Viburnum prunifolium	9	EA		
69	Aesculus parviflora	3	EA		
70	Aronia melanocarpa 'Elata'	19	EA		
71	Cephalanthus occidentalis 'SMCOSS' SUGAR SHACK	62	EA		
72	Diervilla lonicera 'Copper'	104	EA		
73	Hamamelis vernalis	5	EA		
74	Hydrangea paniculata 'Jane' LITTLE LIME	16	EA		
75	Hydrangea quercifolia 'Flemygea' SNOW QUEEN	18	EA		
76	Itea virginica 'Henry's Garnet'	19	EA		
77	Potentilla fruticosa 'Uman' MANGO TANGO (D. fruticosa)	32	EA		
78	Rhus typhina 'Bailtiger' TIGER EYES	106	EA		
79	Ribes alpinum 'Green Mound'	29	EA		
80	Stephanandra incisa 'Crispa'	35	EA		
81	Vibernum acerifolium	22	EA		
82	Viburnum dentatum 'Ralph Senior' AUTUMN JAZZ	7	EA		
83	Viburnum x rhytidophylloides 'Allegheny'	13	EA		
84	Juniperus conferta 'Blue Pacific'	2	EA		
85	Taxus x media 'Wardii'	33	EA		
86	Ilex x meserveae 'Blue Girl', and 'Blue Boy'	5	EA		
87	Parthenocissus quinquefolia	154	EA		
88	Achillea x 'Walther Funcke'	125	EA		
89	Agastache foeniculum 'Blue Fortune'	50	EA		
90	Allium angulosum 'Summer Beauty' (Allium lusitanicum)	13	EA		
91	Amsonia hubrichtii	59	EA		
92	Anemone canadensis	30	EA		
93	Aquilegia canadensis	26	EA		
94	Aralia cordata 'Sun King'	5	EA		
95	Aralia racemosa	15	EA		
96	Artemisia ludoviciana 'Silver King'	3	EA		
97	Asarum canadense	207	EA		
98	Asclepias incarnata	12	EA		
99	Asclepias tuberosa	11	EA		
100	Aster divaricatus (Eurybia divaricata)	49	EA		

101	Aster macrophyllus (Eurybia macrophylla)	110	EA		
102	Aster novea-angliae (Symphyotrichum novae-angliae)	9	EA		
103	Baptisia x 'Purple Smoke'	14	EA		
104	Echinacea pallida	207	EA		
105	Echinacea purpurea 'Magnus'	72	EA		
106	Geranium macrorrhizum 'Bevan's Variety'	474	EA		
107	Geranium maculatum	82	EA		
108	Hemerocallis 'Happy Returns'	116	EA		
109	Heuchera villosa	168	EA		
110	Hosta 'May'	38	EA		
111	Hosta 'Royal Standard'	289	EA		
112	Hosta tardiana 'June'	553	EA		
113	Lavandula angustifolia 'Hidcote'	21	EA		
114	Monarda punctata	161	EA		
115	Pachysandra procumbens	337	EA		
116	Penstemon digitalis 'Husker Red'	15	EA		
117	Polygonatum odoratum var. pluriflorum 'Variegatum'	281	EA		
118	Rudbeckia fulgida var. sullivantii 'Goldsturm'	519	EA		
119	Rudbeckia subtomentosa 'Henry Eilers'	13	EA		
120	Solidago rugosa 'Fireworks'	3	EA		
121	Stachys byzantina	88	EA		
122	Stachys officinalis 'hummelo'	162	EA		
123	Stachys officinalis 'Rosea'	162	EA		
124	Calamagrostis x acutifolra 'Karl Foerster'	298	EA		
125	Carex pensylvanica	490	EA		
126	Deschampsia cespitosa 'Goldtau'	82	EA		
127	Panicum virgatum	224	EA		
128	Schizachyrium scoparium	2	EA		
129	Sesleria autumnalis	161	EA		
130	Sporobolus heterolepis	311	EA		
131	Sporobolus heterolepis 'Tara'	185	EA		
132	Narcissus 'Lemon Drops'	4487	EA		
133	Dryopteris marginalis	49	EA		
134	Bedding Mulch	71	CY		
135	Native Prairie Seeding	7147	SF		
136	Granite Boulders	64	SF		
137	Warranty/Maintenance of Plant Material	1	LS		
	D. Irrigation Plan (L3)				
138	Irrigation System - Des Plaines	1	LS		
139	Irrigation System - Skokie	1	LS		

1 **This is a lump sum contract**. Quantities are provided for bidder's convenenience only. All quantities should be verified by bidders and modified on the bid form or new line items added if necessary.

2 **This is a lump sum contract.** Unit Prices shall be provided for the purpose of establishing costs in the event that the Owner decides to modify the contract during construciton. Unit prices shall include the cost for materials, labor, overhead, and profit.

3 The price extensions shall be determined by multiplying the unit price by the quantity for each item. The sub-total price shall equal the sum of the extended prices. Differences between the sub-total and the sum of the extended prices may be cause for rejection of the bid.

*Contractor is required to guarantee bid pricing until project completion.

SUB-TOTAL	
Performance Bond	
TOTAL LUMP SUM	

SECTION 311000

SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. Illinois DOT Standard Specifications for Road and Bridge Construction, latest edition.

C. Illinois DOT Supplemental Specifications and Recurring Special Provisions, latest edition.

D. Illinois Urban Manual, latest edition.

E. Standard Specifications for Water & Sewer Main Construction in Illinois, latest edition.

1.2 SUMMARY

A. Section Includes:
1. Removing existing vegetation.
2. Clearing and grubbing.
3. Removing waste and debris
4. Removing above- and below-grade site improvements.
5. Disconnecting, capping or sealing, and removing site utilities.
6. Temporary erosion- and sedimentation-control measures.

B. Related Sections:

1. Section 015639 “Temporary Tree and Plant Protection”

2. Section 329300 “Exterior Plantings”

1.3 DEFINITIONS

A. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

B. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches (50 mm) in diameter; and free of subsoil and weeds, roots, toxic materials, or other non-soil materials.

D. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.

E. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and indicated on Drawings.

F. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 MATERIAL OWNERSHIP

A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 INFORMATIONAL SUBMITTALS

A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.

1. Use sufficiently detailed photographs or videotape.
2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.

1.6 QUALITY ASSURANCE

A. Pre-installation Conference: Conduct conference at Project site.

1.7 PROJECT CONDITIONS

A. Traffic: Comply with Site Access requirements as indicated in plans. Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
3. Provide traffic control as required by Owner.

B. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

C. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.

D. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

E. Do not direct vehicle or equipment exhaust towards protection zones.

F. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

A. Topsoil: See specification 329300.

B. Erosion Control Blanket: North American Green, EroNet S150 Short term photodegradable double-net straw erosion control blanket, or approved equal.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Locate and clearly identify trees, shrubs, and other vegetation to remain or to be relocated. Flag each tree trunk at 54 inches (1372 mm) above the ground. Similarly flag or surround in marking tape on stakes a minimum of 4’ above grade shrubs, or herbaceous vegetation to remain.

C. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.

B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.

C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

A. General: Protect trees and plants remaining on-site according to requirements in Section 015639 "Temporary Tree and Plant Protection."

B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations per Section 015639.

3.4 EXISTING UTILITIES

A. Locate, identify, and disconnect utilities indicated to be abandoned in place.

B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Owner not less than two days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Owner’s written permission.

C. Excavate for and remove underground utilities indicated to be removed.

3.5 VEGETATION REMOVAL (HERBACEOUS VEGETATION INCLUDING TURFGRASS)

A. Remove herbaceous vegetation to permit installation of new construction.
1. During the growing season (May 1-Sept 30) apply non-selective herbicide such as Roundup to leaf surfaces and wait at least 10 days to allow the chemical to kill the plants before physically removing the above ground portions of the plant.
2. Outside of the growing season (Oct 1-April 30) herbaceous plants should be pulled so that as much of the root mass is removed as possible.
3. Do not remove trees, shrubs, and other vegetation indicated to remain.

3.6 CLEARING AND GRUBBING (WOODY VEGETATION)

A. Remove any memorial signage from the trunks or at the base of existing trees to be removed and return to the College prior to tree removal activities.

B. Remove woody trees, shrubs, and stumps to permit installation of new construction.

1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
2. Cut out or grind stumps and remove roots, obstructions, and debris to a depth of 18 inches (450 mm) below exposed subgrade.
3. Remove chipped roots and dispose of off site – do not backfill hole left by ground stump with chipped wood.
4. Use only hand methods for grubbing within protection zones or protect soil from unnecessary compaction through the use of plywood supports
5. Chip removed tree branches and dispose of off-site.
6. Import and place fresh topsoil into holes left by ground stumps.

3.7 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.

1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

B. Separate recyclable materials produced during site clearing from other non-recyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000

SECTION 312000

EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Preparing subgrades for bioretention areas, walks, pavements (including unit paving), turf, and grasses and plants.
2. Base course for concrete walks and pavements.
3. Excavating and backfilling trenches for utilities and pits for buried utility structures.
4. Excavating and backfilling for structures.

B. Related Sections:

1. Section 015639 “Temporary Tree and Plant Protection”
2. Section 033100 “Cast in Place Concrete for Landscape”
3. Section 311000 “Site Clearing”
4. Section 321216 “Hot Mix Asphalt Paving”
5. Section 321313 “Concrete Paving”
6. Section 321400 “Unit Paving”
7. Section 329300 "Exterior Plantings" for topsoil in non-bioretention planting areas, and for finish grading in planting areas and tree and shrub pit excavation and planting.

1.3 DEFINITIONS

A. Amended Bioretention Soil (Bioretention Soil): Engineered topsoil, composed of commercial compost and sand, that has been placed and mixed to meet the requirements of this section and designed to readily infiltrate stormwater runoff.

B. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

C. Base Course: Aggregate layer placed between the subgrade and paving.

D. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

E. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work. Refer to Unit Prices specification in bid forms.
2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below base, drainage fill, drainage course, or topsoil materials.

J. Utilities: On-site underground pipes, manholes, conduits, ducts, and cables, as well as underground services within buildings.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of the following manufactured products required:
1. Aggregates: provide gradation and source.
2. Amended Bioretention Soil: product data for component materials.

B. Samples for Verification: For the following products, in sizes indicated below:
1. Aggregates: 1 small bag.
2. Amended Bioretention Soil: 1 gallon.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified testing agency.

B. Material Test Reports: From a qualified testing agency indicating an interpreting test results for compliance with the following:

1. For each on-site and borrow soil material proposed for fill and backfill as follows:
a. Classification according to ASTM D 2487.
b. Laboratory compaction curve according to ASTM D 1557.

2. Amended Bioretention Soil:
a. Organic content and pH measurement of compost component of Amended Bioretention mix per AASHTO T194 and ASTM D4972, respectively.
b. Particle size analysis of sand component of Amended Bioretention mix per ASTM D422-63.

1.6 QUALITY ASSURANCE

A. Soil Testing and Inspection Service:
   1. The **Contractor** will engage a soil testing and inspection service, to include testing soil materials proposed for use in the Work and initial quality control testing during earthwork operations.

B. Preexcavation Conference: Conduct conference at Project site.

1.7 PROJECT CONDITIONS

A. Site Information
   1. The Contractor acknowledges that they have inspected the existing conditions and the information provided in the contract plans and specifications.
   2. No additional subsurface information is available.

B. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.

   1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
   2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

C. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth moving operations.

D. Do not commence earth moving operations until temporary erosion and sedimentation-control measures are in place.

E. Do not commence earth moving operations until plant-protection measures specified in Section 015639 "Temporary Tree and Plant Protection" are in place.

F. The following practices are prohibited within protection zones:

   1. Storage of construction materials, debris, or excavated material.
   2. Parking vehicles or equipment.
   3. Foot traffic.
   4. Erection of sheds or structures.
   5. Impoundment of water.
   6. Excavation or other digging unless otherwise indicated.
   7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

G. Do not direct vehicle or equipment exhaust towards protection zones.

H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

B. Satisfactory Soils: Soil Classification Groups GW, GC, GP, GM, SW, SP, SM, SC, ML, and CL according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

1. Liquid Limit: 40.
2. Plasticity Index: 15.

C. Unsatisfactory Soils: Soil Classification Groups OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

D. Base Course:

1. For concrete paving, asphalt paving, and unit paving: Sound crushed stone or crushed gravel complying with IDOT CA-6.

E. Open Graded Aggregate: Washed, Sound crushed stone or crushed gravel complying with IDOT CA-7.

F. Bedding Course: IDOT CA6, CA9, CA10, CA18, FA1, FA2, FA5, FA6, FA10, or FA21.

G. Sand: ASTM C33 Fine Aggregate.

H. Amended Bioretention Soil (Bioretention Soil): Amended bioretention Soil shall be a blend of 80-90% sand and 10-20% compost by volume meeting the properties in paragraph 3 below. Loamy Sand or Sandy Loam topsoil may be used as a mixture component with prior approval of the Engineer. Compost and topsoil materials shall be dry and friable while mixing. The material shall be pre-mixed prior to placement. In-place mixing may be accepted with prior approval by the engineer.

1. Compost:
   a. Particle Size: 98% of the compost shall pass through a 0.75-inch screen.
   b. Physical Contaminants: Less than 1% combined glass, metal, and plastic.
   c. Organic Matter / Ash Content: At least 40% organic matter; less than 60% ash content.
   d. Carbon to Nitrogen Ratio: 10-20:1 C:N.
   e. pH: 6-8.
   f. Soluble Salts: Electrical conductivity below 10dS/m.
   g. Moisture Content: 35-50% by weight.
   h. Maturity: The compost shall be resistant to further decomposition and free of compounds, such as ammonia and organic acids, in concentrations toxic to plant growth.
   i. Residual Seeds & Pathogens: Pathogens and noxious seeds shall be minimized.
   j. Compost shall meet Illinois Administrative Code specifications for General Use Compost [35.G.I.i.830].

2. Properties: Amended Bioretention Soil shall be thoroughly mixed prior to placement and meet the following properties in accordance with ASTM D422-63, AASHTO T194 and ASTM D4972. Tests shall be submitted and approved by the Engineer prior to planting for two discrete samples per mixing batch. The mix shall meet the following properties by weight per ASTM:

a. Proportion of Sand: 80%-90%
b. Proportion of Clay (hydrometer analysis): 2% to 5%
c. Organic Content: 3%-5%
d. Ph: 6.8 ≤ pH < 8.0

I. Topsoil: Per Section 329300.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.

B. Protect and maintain erosion and sedimentation controls during earth moving operations.

C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.3 EXCAVATION, GENERAL

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
2. Remove rock to lines and grades indicated to permit installation of permanent construction without exceeding the following dimensions:

a. 6 inches beneath bottom of concrete slabs-on-grade.
b. 6 inches beneath pipe in trenches, and the greater of 24 inches wider than pipe or 42 inches wide.

3.4 EXCAVATION FOR STRUCTURES

A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing

and removing concrete formwork, for installing services and other construction, and for inspections

1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
2. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended as bearing surfaces.

B. Excavations at Edges of Tree-and Plant-Protection Zone:

1. Excavate by hand to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
2. Cut and protect roots according to requirements in Section 015639 “Temporary Tree and Plant Protection”.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.

B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.

1. Clearance: Per Plan

C. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.

1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

D. Trenches in Tree- and Plant-Protection Zones:

1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.
3. Cut and protect roots according to requirements in Section 015639 "Temporary Tree and Plant Protection."

3.7 SUBGRADE INSPECTION

A. Notify Engineer / testing agency when excavations have reached required subgrade.

B. If Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.

C. Proof-roll subgrade below walks and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.

D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.

E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.8 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi may be used when approved by Engineer.

1. Fill unauthorized excavations under other construction, pipe, or conduit.

3.9 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.10 BACKFILL

A. Place and compact backfill in excavations promptly, but not before completing the following:

1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
2. Surveying locations of underground utilities for Record Documents.
3. Testing and inspecting underground utilities.
4. Removing concrete formwork.
5. Removing trash and debris.
6. Removing temporary shoring and bracing, and sheeting.
7. Installing permanent or temporary horizontal bracing on horizontally supported walls.

B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.11 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Backfill voids with satisfactory soil while removing shoring and bracing.

D. Place and compact initial backfill as indicated on Drawings.

1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

E. Final Backfill:

1. Sanitary Sewer, Solid Storm Sewer, and Watermain: Final backfill of clay soil meeting USC CL classification to final subgrade elevation

2. Perforated and solid PE Storm Sewer Pipe: Washed, Sound crushed stone or crushed gravel complying with IDOT CA-7.

3.12 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.
2. Under walks and pavements, use satisfactory soil material.

C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.13 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.14 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:

1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
2. Under bioretention do not compact subgrade.
3. Under walkways, compact each layer of backfill or fill soil material at 92 percent.
4. Under turf or unpaved areas, compact each layer of backfill or fill soil material at 85 percent.
5. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

3.15 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

1. Provide a smooth transition between adjacent existing grades and new grades.
2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Turf or Unpaved Areas: Plus or minus 1 inch.
2. Walks: Plus or minus 1 inch.
3. Pavements: Plus or minus 1/2 inch.

3.16 BASE COURSES UNDER PAVEMENTS AND WALKS

A. Place base course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place base course under pavements and walks as follows:

1. Where indicated, install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
2. Where indicated, install Curtain Liner where indicated.
3. Place base course material over subgrade under pavements.
4. Shape base course to required crown elevations and cross-slope grades.
5. Place base course 6 inches or less in compacted thickness in a single layer.
6. Place base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
7. Compact base course for concrete and asphalt paving at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.
8. Compact base course for bioretention areas according to AASHTO guidelines for installing open graded aggregates. Base course shall not be over-compacted, which may cause particle abrasion and introduction of fine material into base course.

3.17 BIORETENTION AREAS

A. Inspect subgrade and remove accumulated sediment or debris from native subgrade.

B. Verify that subgrades are constructed to the lines and grades indicated on plans.

C. Scarify subgrade to a depth of 8 inches using a disc attachment or cultivator as shown on plans.

D. Verify rough grades prior to placement of Amended Bioretention Soil layers.

E. Place Amended Bioretention Soil layers as indicated on plans.

F. Place pre-mixed, dry Amended Bioretention Soil. Wet placed Amended Bioretention Soil will not be accepted.
   1. Place in 8 inch lifts and lightly compact will dry with hand roller weighing no more than 100 lbs per foot of width.
   2. For final lift, all depressions caused by settlement of rolling shall be filled with additional Amended Bioretention Soil and the surface shall be re-graded and rolled until a smooth and even finish to the indicated elevations and sections.

G. Amended Bioretention Soil contaminated by construction site runoff, sediment, or other foreign materials shall be removed and replaced at no additional expense to the Owner.

3.18 TOPSOIL

A. Per Section 329300.

B. Minimum topsoil respreading depth shall be 6 inches.

3.19 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
   1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
   2. Determine that fill material and maximum lift thickness comply with requirements.
   3. Determine, at the required frequency, that in-place density of compacted fill complies with requirements.

B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.

D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:
   1. Pavement Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. (186 sq. m) or less of paved area or building slab, but in no case fewer than three tests.
   2. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 150 feet (46 m) or less of trench length, but no fewer than two tests.

E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; re-compact and retest until specified compaction is obtained.

3.20 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and recompact.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

D. During and after excavation to subgrade for bioretention areas, the subgrade shall be protected from construction traffic and construction site runoff. Any rutting, over-compaction, clogging, or other damage to the subgrade of the porous unit paving or bioretention areas shall be repaired to re-establish permeability, lines, and grades at no additional expense to the Owner.

E. Protecting Bioretention Areas: After placement of Amended Bioretention Soil, bioretention areas shall be protected from construction traffic and trampling by temporary silt fence.

1. Amended Bioretention Soil contaminated with construction site runoff shall be removed to a depth of 6 inches and replaced with fresh Amended Bioretention Soil meeting these specifications.
2. Amended Bioretention Soil compacted by construction traffic or trampling shall be removed and replaced with fresh Amended Bioretention Soil meeting these specifications.

3.21 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION

F L2.05 REMOVE TREE AND GRIND STUMP, TYP. LOWER FINISHED GRADE BELOW ADJACENT WALK

PROTECT AND PRESERVE EXISTING GREEN MOUNTAIN BOXWOOD

REMOVE TREE AND GRIND STUMP, TYP.

TREE PROTECTION FENCE, TYP.

REMOVE EXISTING ASH TREE 1

REMOVE WEEDY SAPLINGS FROM VIBURNUM

SAWCUT AND REMOVE CONCRETE PAVING (APPROX 18"x36" SIZE) JUTTING OUT INTO PLANTING AND REPLACE WITH 4" OF TOPSOIL

REMOVE EXISTING PIPE GUARDRAIL. SAW POST FLUSH WITH EXISTING CONCRETE SURFACE AND REPLACE WITH NEW GUARDRAIL

SAWCUT AND REMOVE UPPER PORTION OF CONCRETE RETAINING WALL TO MATCH ADJACENT CONDITION

REMOVE EXISTING PIPE GUARDRAIL. SAWCUT POST FLUSH WITH EXISTING CONCRETE SURFACE AND REPLACE WITH NEW GUARDRAIL

SAWCUT AND REMOVE UPPER PORTION OF CONCRETE RETAINING WALL TO MATCH ADJACENT CONDITION. CUT TOP OF WALL ON A SLOPE SO THAT IT IS FLUSH WITH ADJACENT SIDEWALK IN THIS AREA.

REMOVE ANNUAL BEDS AND STONE EDGING, TYP.

PROTECT AND PRESERVE EXISTING GREEN MOUNTAIN BOXWOOD

REMOVE HONEYLOCUST AND GRIND STUMP

PROTECT AND PRESERVE EXISTING GREEN MOUNTAIN BOXWOOD

REMOVE EXISTING BENCH, FOOTINGS, AND STONE PAVING

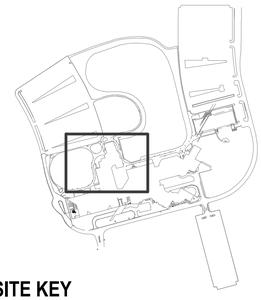
REMOVE HONEYLOCUST AND GRIND STUMP

PRUNE EXISTING HONEYLOCUST OFF OF BUILDING

REMOVE EXISTING BENCH, FOOTINGS, AND STONE PAVING

BRICK AND STEEL BUILDING

SITE KEY



LEGEND

- REMOVE AND DISPOSE OF TREE AND GRIND STUMPS TO A MINIMUM 18 INCH DEPTH
- REMOVE EXISTING STUMP AND GRIND TO A MINIMUM 18 INCH DEPTH
- REMOVE AND DISPOSE OF GRAVEL SURFACING
- REMOVE AND DISPOSE OF CONCRETE PAVING AND AGGREGATE BASE
- REMOVE AND DISPOSE OF WALL
- REMOVE AND DISPOSE OF SHRUBS AND PERENNIALS
- REMOVE TURFGRASS
- REMOVE FENCING
- PLANT PROTECTION FENCE SEE A/L2.01
- REMOVE AND DISPOSE OF ASPHALT SURFACING

NOTES

1. COORDINATE WITH UTILITY SERVICE AND FACILITY SERVICES PROVIDERS PRIOR TO DISCONNECTING AND REMOVING ELECTRIC, AND TELECOMMUNICATION SERVICES AND APPURTENANCES.
2. REMOVE ALL VEGETATION NECESSARY TO INSTALL NEW LANDSCAPING AND OTHER IMPROVEMENTS. FLAG ALL TREES TO BE REMOVED AND MEET WITH LANDSCAPE ARCHITECT TO CONFIRM TREE AND VEGETATION REMOVALS PRIOR TO DEMOLITION ACTIVITIES.
3. SEQUENCE DEMOLITION AND CONSTRUCTION OF PAVEMENT IN FRONT OF DOOR #5 TO PROVIDE ACCESSIBLE ACCESS AT ALL TIMES, OR CONSTRUCT TEMPORARY RAMP COMPLYING WITH STATE AND FEDERAL ACCESSIBILITY CODES.
4. SEE SPECIFICATION 015639 FOR TEMPORARY TREE AND PLANT PROTECTION.
5. SEE SPECIFICATION 311000 FOR SITE CLEARING.
6. 1 CONTRACTOR RESPONSIBLE FOR PROTECTING POND FROM AIRBORNE DUST AND DEBRIS RESULTING FROM WALL REMOVAL ACTIVITIES. CONTRACTOR SHALL EMPLOY ALL REASONABLE MEASURES (I.E. WET SAWS, DUST CONTROL FABRIC, VACUUMS, ETC.) TO PREVENT CONCRETE DUST FROM GETTING INTO THE POND.

CALL BEFORE YOU DIG
811 OR 1-800-892-0123

ECT
403 West St. Charles Road
Lombard, IL 60148
Phone: (630) 559-2000
www.ectinc.com

8/23/2023 3:06 PM by Jason A. Cooper

OAKTON COMMUNITY COLLEGE

LANDSCAPING AT VARIOUS SITES

ECT PROJECT No.:	
DESIGNED BY:	22-0627
DRAWN BY:	XXX
CHECKED BY:	XXX/XXX
APPROVED BY:	XXX/XXX
STATUS: BID DOCUMENTS	XXX 08-11-2023
REVISIONS:	
1 ADDENDUM #1	08-25-2023

REMOVALS & SITE PREP

DES PLAINES CAMPUS

N

SCALE: 1" = 20' @ 22 X 34

0 10 20 40

C1.11

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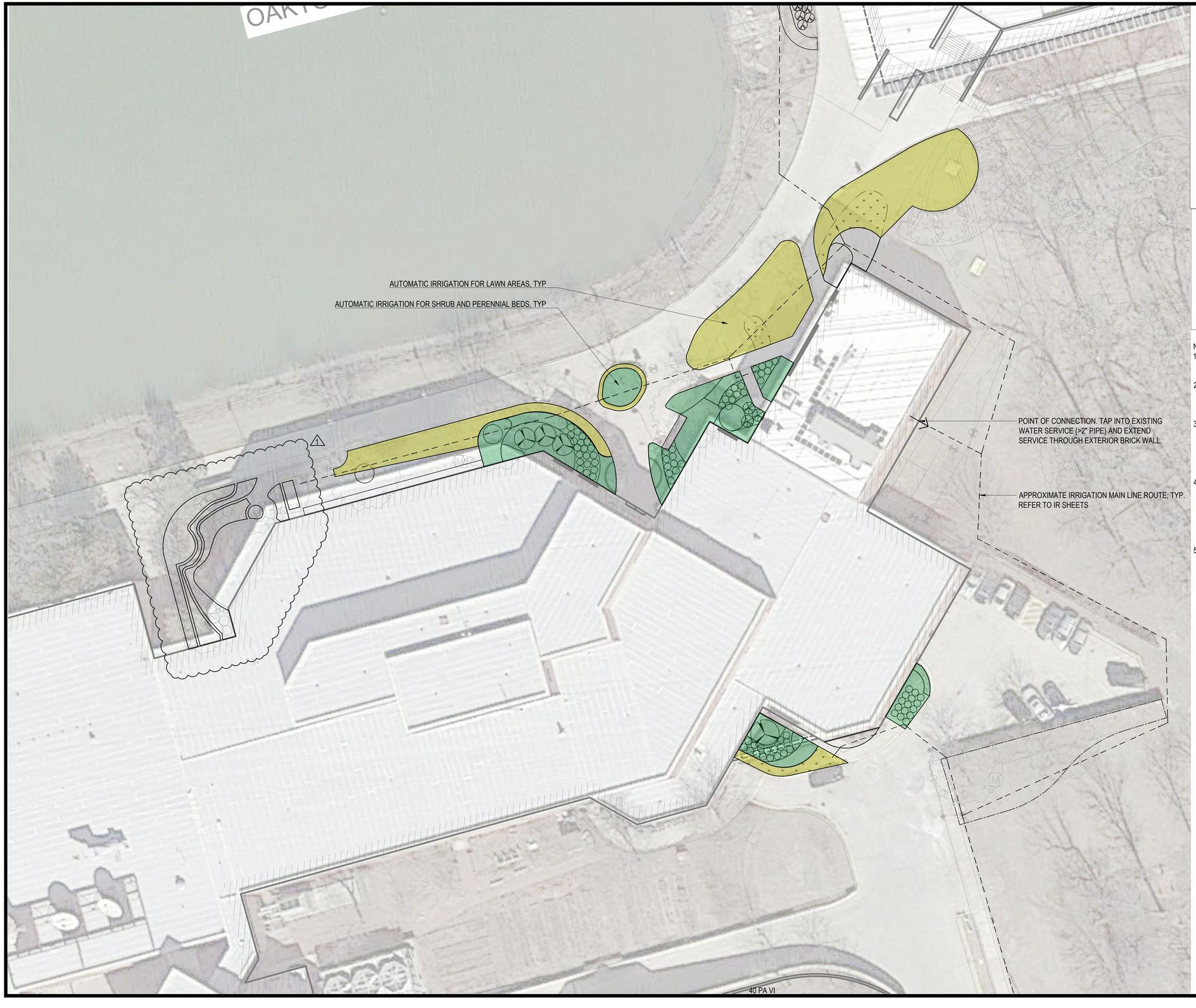

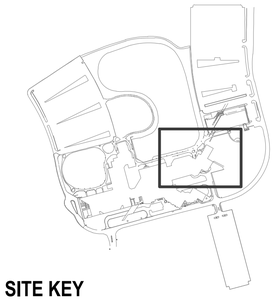

SITE KEY

LEGEND

- AUTOMATIC IRRIGATION FOR SHRUB AND PERENNIAL BEDS
- AUTOMATIC IRRIGATION FOR LAWN AREAS
- DRIP LINE IRRIGATION
- APPROXIMATE IRRIGATION MAIN LINE ROUTE. REFER TO IR SHEETS

NOTES:

1. REFER TO SHEETS IR-1 THRU IR-3 FOR ACTUAL LOCATIONS OF MAIN LINES, LATERAL LINES, IRRIGATION HEADS, AND APPERTUNANCES.
2. CONTRACTOR SHALL INCLUDE THE EXTENSION OF ELECTRICAL SERVICE FROM WITHIN THE BUILDING TO THE POINTS OF CONNECTION TO PROVIDE A FULLY FUNCTIONING SYSTEM.
3. CONTRACTOR SHALL REPAIR/REPLACE/PATCH ANY INTERIOR OR EXTERIOR WALLS THAT ARE DAMAGED DURING THE INSTALLATION OF THE IRRIGATION SYSTEM OR THE EXTENSION OF THE INTERIOR PLUMBING THAT MAY BE NECESSARY TO SERVE THE POINTS OF CONNECTION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SLEEVES AND PIPING UNDER EXISTING PAVING VIA BORING. OPEN TRENCH INSTALLATION WILL BE ALLOWED UNDER EXISTING PAVING AT THE DISCRETION OF THE OWNER. IF THE OWNER PERMITS OPEN TRENCHING, CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING EXISTING PAVING.
5. CONTRACTOR SHALL TAKE CARE TO PREVENT UNNECESSARY DISTURBANCE OF EXISTING LANDSCAPE. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING EXISTING LANDSCAPE DISTURBED BY TRENCHING ACTIVITIES. THIS WILL INCLUDE REPLACING TURFGRASS SOD, TOPSOIL, AND MULCH BEDDING.

CALL BEFORE YOU DIG
811 OR 1-800-892-0123

ECT
403 West St. Charles Road
Lombard, IL 60148
Phone: (630) 559-2000
www.ectinc.com

OAKTON COMMUNITY COLLEGE

LANDSCAPING AT VARIOUS SITES

ECT PROJECT No.:	22-0627
DESIGNED BY:	XXX
DRAWN BY:	XXX/XXX
CHECKED BY:	XXX/XXX
APPROVED BY:	XXX

STATUS:
BID DOCUMENTS 08-11-2023

REVISIONS:

1 ADDENDUM #1	08-25-2023

IRRIGATION PLAN

DES PLAINES CAMPUS

N

SCALE: 1" = 20' @ 22 X 34
0 10 20 40

L3.12

8/23/2023 2:33 PM by Jason A. Cooper

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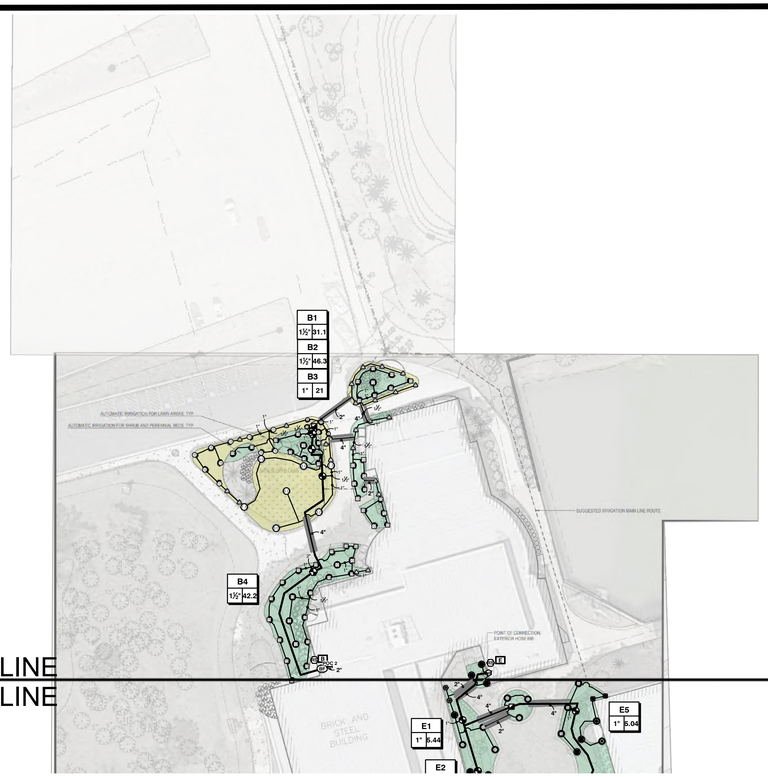
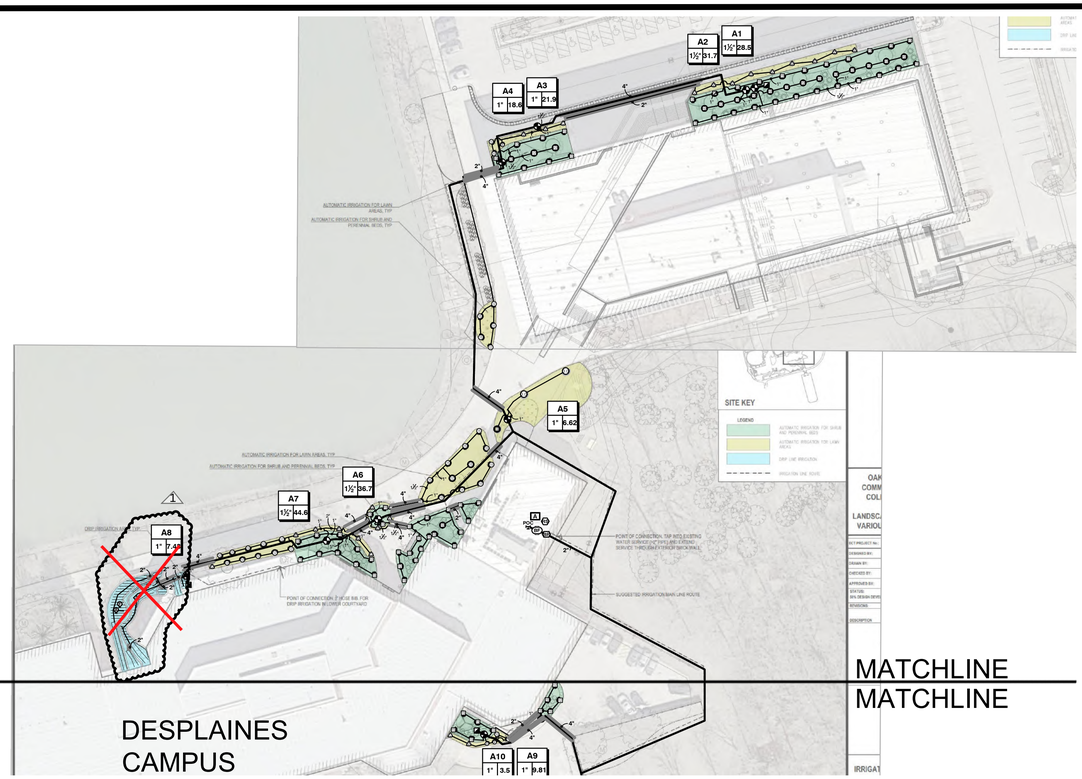


MATCHLINE
MATCHLINE



MATCHLINE
MATCHLINE

IRRIGATION SCHEDULE ~~ALTERNATE BID~~ 1

SYMBOL	MANUFACTURER/MODEL	QTY
MP1000	Hunter MP1000 PROS-04-PRS40-CV	2
MP2000	Hunter MP2000 PROS-04-PRS40-CV	4
MP3000	Hunter MP3000 PROS-04-PRS40-CV	2
800 A 800 F	Hunter MP800SR PROS-04-PRS40-CV	2
SYMBOL	**MANUFACTURER/MODEL**	**QTY**
	Hunter PGV-101G 1"	5
	Hunter HQ-5RC 1"	1
E	I2C-800PL	1
WR	Hunter WR-CLIK	1
	Irrigation Lateral Line: Polyethylene Pipe 80 PSI 1"	784.1 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21 1"	244.8 l.f.
	Pipe Sleeve: PVC Schedule 40 2"	52.2 l.f.
	Pipe Sleeve: PVC Schedule 40 4"	64.1 l.f.

Valve Callout
Valve Number
Valve Flow
Valve Size

IRRIGATION SCHEDULE CAMPUS

SYMBOL	MANUFACTURER/MODEL	QTY
E5 E10 E15 E20 E30	Hunter PROS-04 5' strip spray	45
Q T H F	Hunter PROS-04 8' radius	12
Q T H F	Hunter PROS-04 10' radius	18
Q T H F	Hunter PROS-04 12' radius	7
Q T H F	Hunter PROS-04 15' radius	24
E5 E10 E15 E20 E30	Hunter PROS-12 5' strip spray	38
Q T H F	Hunter PROS-12 8' radius	33
Q T H F	Hunter PROS-12 10' radius	43
Q T H F	Hunter PROS-12 12' radius	57
Q T H F	Hunter PROS-12 15' radius	221
MP2000	Hunter MP2000 PROS-04-PRS40-CV	1
SYMBOL	**MANUFACTURER/MODEL**	**QTY**
1.5	Hunter PGP-04 1.5	2
3.0	Hunter PGP-04 3.0	6
6.0	Hunter PGP-04 6.0	1
SYMBOL	**MANUFACTURER/MODEL**	**QTY**
	Hunter PCZ-101-40 1"	1
	Flush Valve	1
	Drip Air Relief Valve	1
	Area to Receive Dripline Hunter HDL-06-12 12	447.5 l.f.
	Hunter HDL-06-12-PC	274.4 l.f.
SYMBOL	**MANUFACTURER/MODEL**	**QTY**
	Hunter PGV-101G 1"	9
	Hunter PGV-151 Globe 1-1/2"	16
	Hunter HQ-5RC 1"	10
GF	Zurn 375S 1-1/2"	2
GF	Zurn 375S 2"	1
C	Hunter I2C-1600-PL	1
A	Hunter I2C-1600-PL	1
B	I2C-800PL	1
WR	Hunter WR-CLIK	3
BP	Booster Pump	2
POC 2 "B"	POC 2"	1
POC "C"	Point of Connection 1-1/2"	2
	Irrigation Lateral Line: Polyethylene Pipe 80 PSI 1"	7,101 l.f.
	Irrigation Lateral Line: Polyethylene Pipe 80 PSI 1 1/2"	1,019 l.f.
	Irrigation Lateral Line: Polyethylene Pipe 80 PSI 2"	133.2 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21	13.8 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21 2"	3,099 l.f.
	Pipe Sleeve: PVC Schedule 40 2"	377.0 l.f.
	Pipe Sleeve: PVC Schedule 40 4"	640.9 l.f.

Valve Callout
Valve Number
Valve Flow
Valve Size

IRRIGATION SPECIFICATIONS

1. IRRIGATION SYSTEM DESIGN BASED ON 50 & 5 GPM AT 70 PSI.
2. IRRIGATION DESIGN IS FROM THE POINT OF CONNECTION(POC)ONLY. THE DESIGN IS BASED ON GALLONS PER MINUTE(GPM)AND POUNDS PER SQUARE INCH(PSI)FURNISHED BY OTHERS.
3. IRRIGATION CONTRACTOR IS TO VERIFY POINT OF CONNECTION IN THE FIELD. INSTALLER IS TO CONFIRM THE MINIMUM DISCHARGE REQUIREMENTS OF THE POINT OF CONNECTION AS INDICATED ON THE LEGEND PRIOR TO INSTALLATION.
4. THE PRESSURE REQUIREMENT AT THE POINT OF CONNECTION IS BASED ON NO MORE THAN 5 FEET OF ELEVATION CHANGE IN THE AREAS OF IRRIGATION.
5. ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO LOCAL BUILDING, ELECTRICAL, AND PLUMBING CODES.
6. IRRIGATION CONTRACTOR WILL ARRANGE INSPECTIONS REQUIRED BY LOCAL AGENCIES AND ORDINANCES DURING THE COURSE OF CONSTRUCTION AS REQUIRED. ALL WIRING TO BE PER LOCAL CODE. BACKFLOW PREVENTION TO BE PER LOCAL CODE.
7. LOCATION OF IRRIGATION COMPONENTS SHOWN ON DRAWING IS APPROXIMATE. ACTUAL PLACEMENT MAY VARY SLIGHTLY AS REQUIRED TO ACHIEVE FULL, EVEN COVERAGE.
8. ALL SPRINKLER HEADS SHALL BE INSTALLED PERPENDICULAR TO FINISH GRADES. EXCEPT AS OTHERWISE INDICATED.
9. INSTALL IRRIGATION MAINS WITH A MINIMUM 18" OF COVER BASED ON FINISH GRADES. INSTALL IRRIGATION LATERALS WITH MINIMUM 12" OF COVER BASED ON FINISH GRADES.
10. PIPE LOCATIONS ARE DIAGRAMMATIC. VALVES AND MAINLINE SHOWN IN PAVED AREAS ARE FOR GRAPHIC CLARITY ONLY.
11. THE IRRIGATION CONTRACTOR SHALL COMPLY WITH PIPE SIZES AS INDICATED.
12. ALL WIRE SPLICES OR CONNECTIONS SHALL BE MADE WITH APPROVED WATERPROOF WIRE CONNECTIONS AND BE IN A VALVE OR SPLICE BOX.
13. ALL CONTROL WIRING DOWNSTREAM OF THE CONTROLLER IS TO BE 141WHT2500 FOR COMMON,18 HD MULTI FOR CONTROL WIRE, UL APPROVED DIRECT BURY.
14. THE DESIGN IS BASED ON THE SITE INFORMATION AND/OR DRAWING SUPPLIED WITH THE DESIGN CRITERIA BEING SET(AREA TO BE IRRIGATED, EQUIPMENT MANUFACTURER AND MODEL TO BE USED, WATER SOURCE INFORMATION, ELECTRICAL POWER AVAILABILITY, ETC...). SITEONE LANDSCAPE SUPPLY BEARS NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS IN DESIGN OR INSTALLATION THAT ARISE DUE TO INACCURACIES IN THE ABOVE REFERENCED INFORMATION SUPPLIED TO SITEONE LANDSCAPE SUPPLY LANDSCAPES IN RELATION TO THIS PROJECT, UNLESS OTHERWISE NOTED.

SCALE: 1" = 50' - 0"
0' 25' 50' 100'

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Project Name:
OAKTON CC SKOKIE & DESPLAINES
Skokie, IL, 60076

Customer Name:

Design Date: 10/14/22
Drawn By: CH
Checked By: C. BEST

REVISIONS

Description	Date
1 Addendum 1	08/25/2023
2	
3	
4	
5	
6	

Drawing Title:
IRRIGATION DESIGN
DESPLAINES CAMPUS

Drawing Scale: 1" = 50'

Project Services Number: 303665

Sheet Number:
IR-2