



Draper Aden Associates

Engineering • Surveying • Environmental Services

46 W. Washington Street
Coats, North Carolina 27521
(910) 897-7070 • Fax (910) 897-6767
www.daa.com

March 29, 2016

NC Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
Attn: Elizabeth S. Werner
1646 Mail Service Center
Raleigh, NC 27699-1646

**RE: Cell 2 Certification
Weeks LCID Landfill
SWS Permit No. 43F
(via email and UPS)
Draper Aden Associates Project No. R14499N-01G**

Dear Ms. Werner:

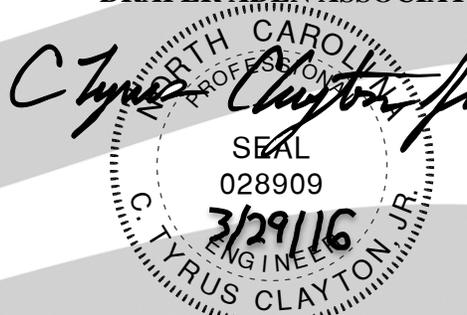
On behalf of the Weeks LCID Landfill, the purpose of this letter is to meet the Condition of the Permit to Construct, Item 3.a (page 5 of 9) as included in the Permit to Construct Cell 2 and Operate Cells 1 and 2 as issued on June 2, 2015. Based on our onsite inspections, the operator of this facility has prepared Cell 2 in substantial compliance with the design drawings dated November 6, 2013 by C. T. Clayton, Sr., PE, Inc. (photos attached)

In addition, based on our conversations with you, Liz Patters and Drew Hammonds, attached are updated drawings of the facility. In particular, the following updates have been made:

1. Existing topography has been updated within the limits of the landfill per the January 2016 survey.
2. Additional information has been included concerning material storage and processing areas on Sheet 3 of the drawings, with reference made to the approved operational plan.

We hope that this information is sufficient to allow for waste disposal within Cell 2. Should you have any questions, concerns, or need additional information, please do not hesitate to contact our office at the numbers below.

Sincerely,
DRAPER ADEN ASSOCIATES



C. Tyrus Clayton, Jr., PE
Senior Project Manager

attachments (photos and drawings)
cc: file
Liz Patterson (via email)
Weeks LCID (via email)

Pictures below are from an onsite inspection on January 28, 2016.





WEEKS SANDPIT No. 2 LCID LANDFILL

HARNETT COUNTY

PERMIT DRAWINGS

UPDATED - MARCH 2016

PERMIT #: 43F-LCID-2010

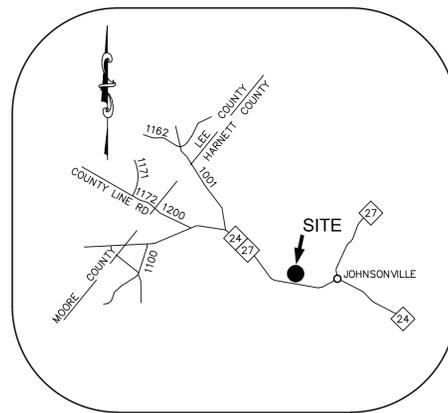
REGISTERED AGENT: J. S. WEEKS
8731 OLD E. C. WOMACK RD.
SANFORD, NC 27330
PO BOX 687
BROADWAY, NC 27505
(910) 258-3911

OPERATOR INFORMATION

OPERATED BY: J. S. WEEKS SAND, INC.
20170 HWY. 24-27
PO BOX 540
CAMERON, NC 28326
(910) 890-8653
CONTACT: J. S. WEEKS OR JEFF LEES

SHEET INDEX

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EXISTING CONDITIONS PLAN	1
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VICINITY MAP
NOT TO SCALE



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48 W. Washington Street
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COVER SHEET
WEEKS SANDPIT No.2 LCID LANDFILL
HARNETT COUNTY, NORTH CAROLINA

REVISIONS

3.1.16
CELL 2 ASBUILT AND
OPERATIONAL NOTE UPDATE

DESIGNED BY:
CTC Jr.

DRAWN BY:
APM

CHECKED BY:
CTC Jr.

SCALE:
NONE

DATE:
3.1.16

PROJECT NUMBER:
R14499N-01G

0



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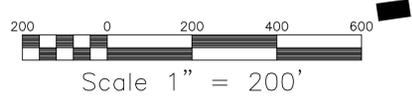
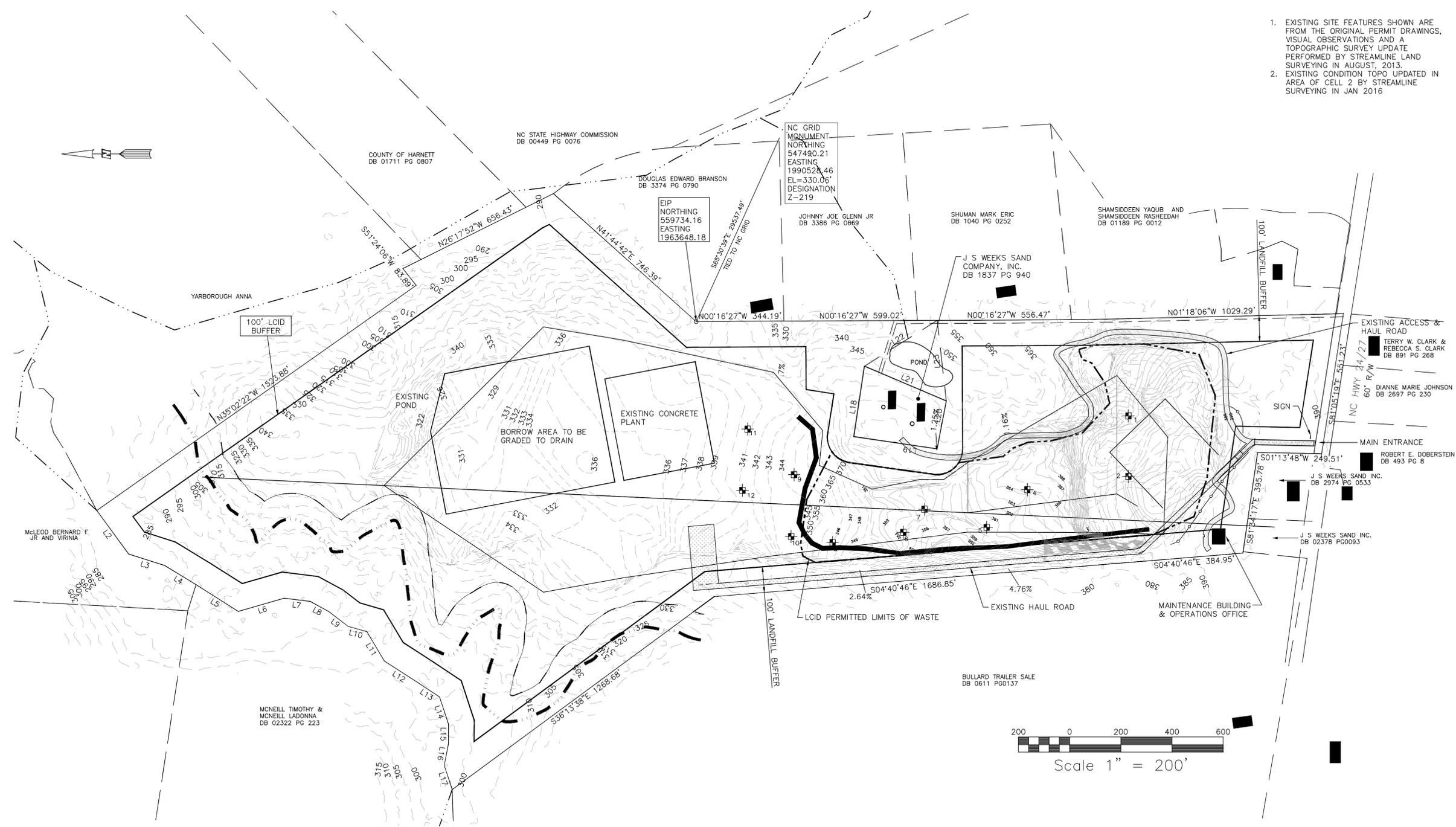


EXISTING CONDITIONS PLAN
WEEKS SANDPIT No.2 LCID LANDFILL
 HARNETT COUNTY, NORTH CAROLINA

REVISIONS
 3.1.16
 CELL 2 ASBUILT AND
 OPERATIONAL NOTE UPDATE

DESIGNED BY: CTC Jr.
 DRAWN BY: APM
 CHECKED BY: CTC Jr.
 SCALE: 1" = 200'
 DATE: 3.1.16
 PROJECT NUMBER: R14499N-01G

- EXISTING SITE FEATURES SHOWN ARE FROM THE ORIGINAL PERMIT DRAWINGS, VISUAL OBSERVATIONS AND A TOPOGRAPHIC SURVEY UPDATE PERFORMED BY STREAMLINE LAND SURVEYING IN AUGUST, 2013.
- EXISTING CONDITION TOPO UPDATED IN AREA OF CELL 2 BY STREAMLINE SURVEYING IN JAN 2016



LINE TABLE		
L2	S53°41'54"W	209.88'
L3	S17°46'18"W	148.68'
L4	S17°46'18"W	148.68'
L5	S17°46'18"W	148.68'
L6	S17°46'18"W	148.68'
L7	S17°46'18"W	148.68'
L8	S17°46'18"W	148.68'
L9	S17°46'18"W	148.68'
L10	S17°46'18"W	148.68'
L11	S17°46'18"W	148.68'
L12	S17°46'18"W	148.68'
L13	S17°46'18"W	148.68'
L14	S17°46'18"W	148.68'
L15	S17°46'18"W	148.68'
L16	S17°46'18"W	148.68'
L17	S17°46'18"W	148.68'
L18	S17°46'18"W	148.68'
L19	S17°46'18"W	148.68'
L20	S17°46'18"W	148.68'
L21	S17°46'18"W	148.68'
L22	S17°46'18"W	148.68'
L24	S17°46'18"W	148.68'

LEGEND	
	PROPERTY LINE
	100' LCID BUFFER
	LCID WASTE LIMITS
	WETLAND LIMITS
	100' WETLAND BUFFER
	BASE CONTOUR
	EXISTING CONTOUR
	PHASE LINE
	SECTION LINE
	EXISTING ROAD
	PROPOSED HAUL ROAD
	EXISTING BUILDING
	APPROXIMATE LOCATION OF TEST PIT

2011 14499N-01G.DWG:CTC CAD:TRAVIS CLAYTON:CTC LANDFILL.DWG: MARCH 29, 2016 4:30:11 PM



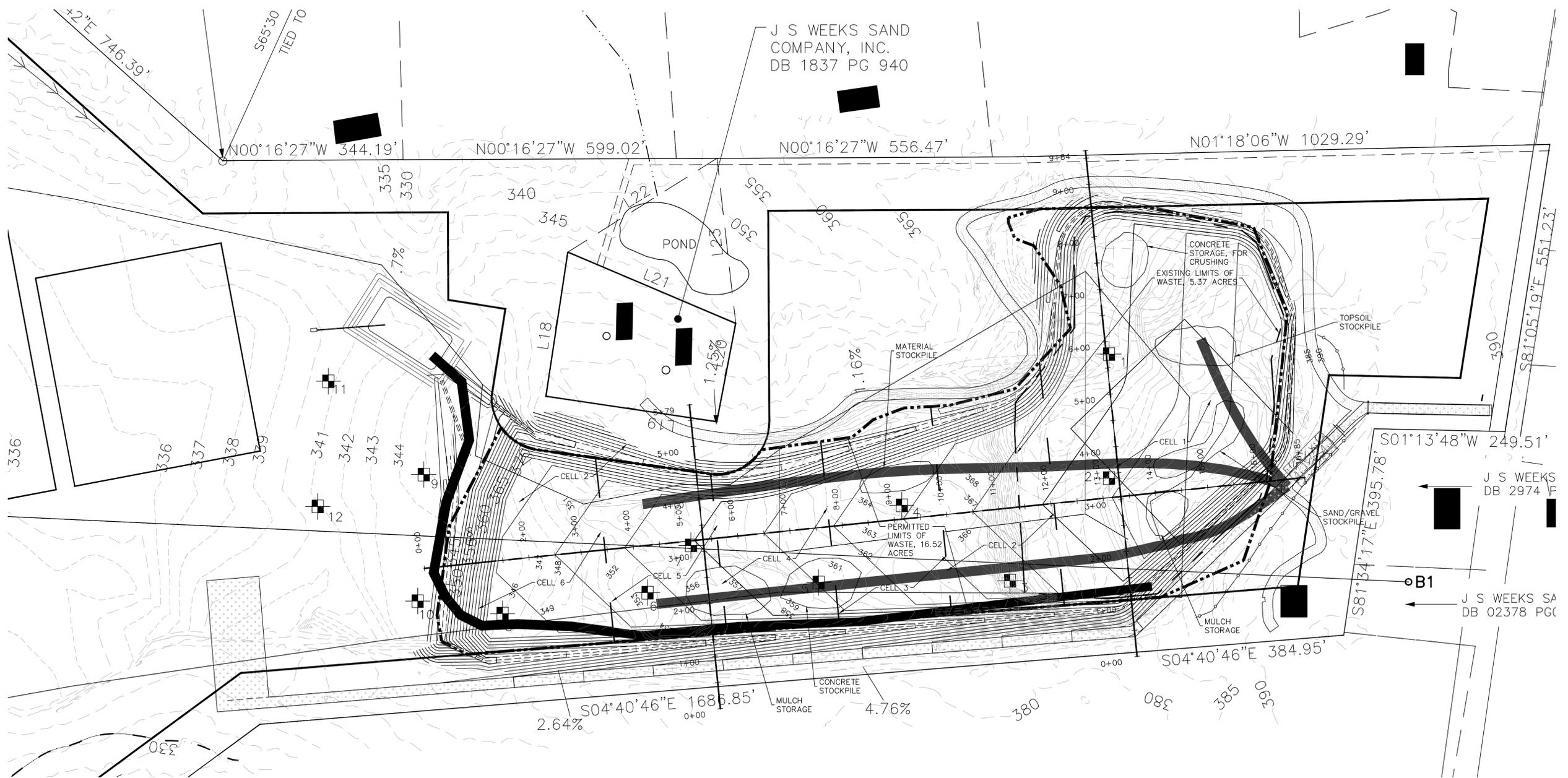
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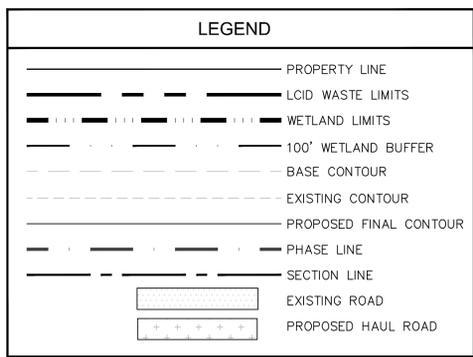
FILL PLAN
WEEKS SANDPIT No.2 LCID LANDFILL
 HARNETT COUNTY, NORTH CAROLINA

REVISIONS
 3.1.16
 CELL 2 ASBUILT AND OPERATIONAL NOTE UPDATE

DESIGNED BY: CTC Jr.
 DRAWN BY: APM
 CHECKED BY: CTC Jr.
 SCALE: 1" = 100'
 DATE: 3.1.16
 PROJECT NUMBER: R14499N-01G



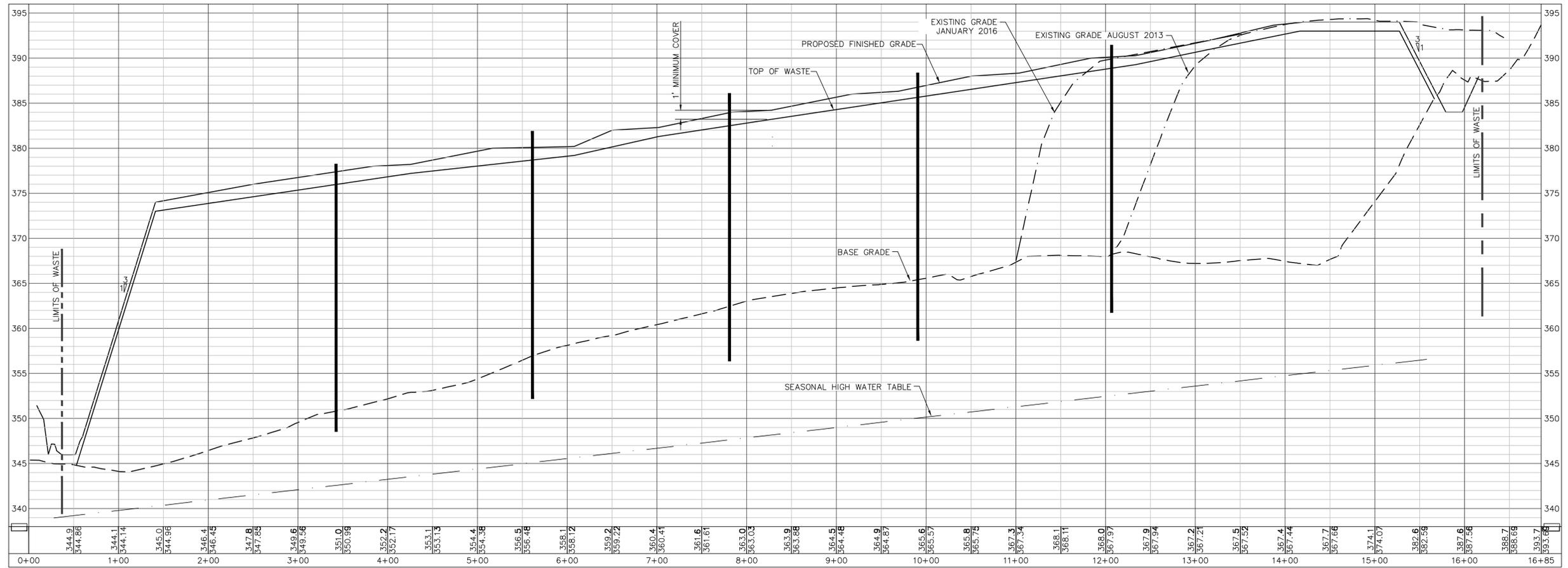
L2	S53°41'54"W	209.88'
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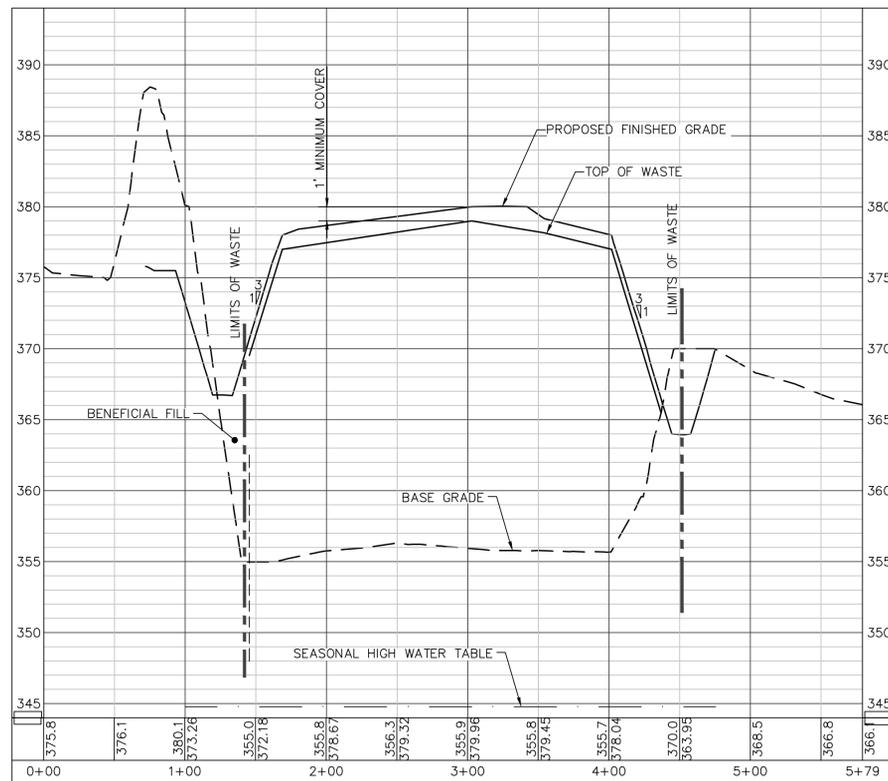
MATERIAL PROCESSING AND STORAGE NOTES

1. STOCKPILE LOCATIONS SHOWN ARE EXISTING AS OF JANUARY 2016, BUT ARE SUBJECT TO CHANGE.
2. MATERIAL IDENTIFIED IN THE APPROVED OPERATIONAL PLAN CAN BE STOCKPILED WITHIN THE PERMITTED LANDFILL LIMITS. MATERIAL STOCKPILES SHALL BE FOR PROCESSING OR RE-SALE.
3. SECTIONS 21 & 22 OF THE APPROVED OPERATIONAL PLAN, DATED 11/6/2013 BY CT CLAYTON, SR. PE, INC. SHALL BE FOLLOWED.

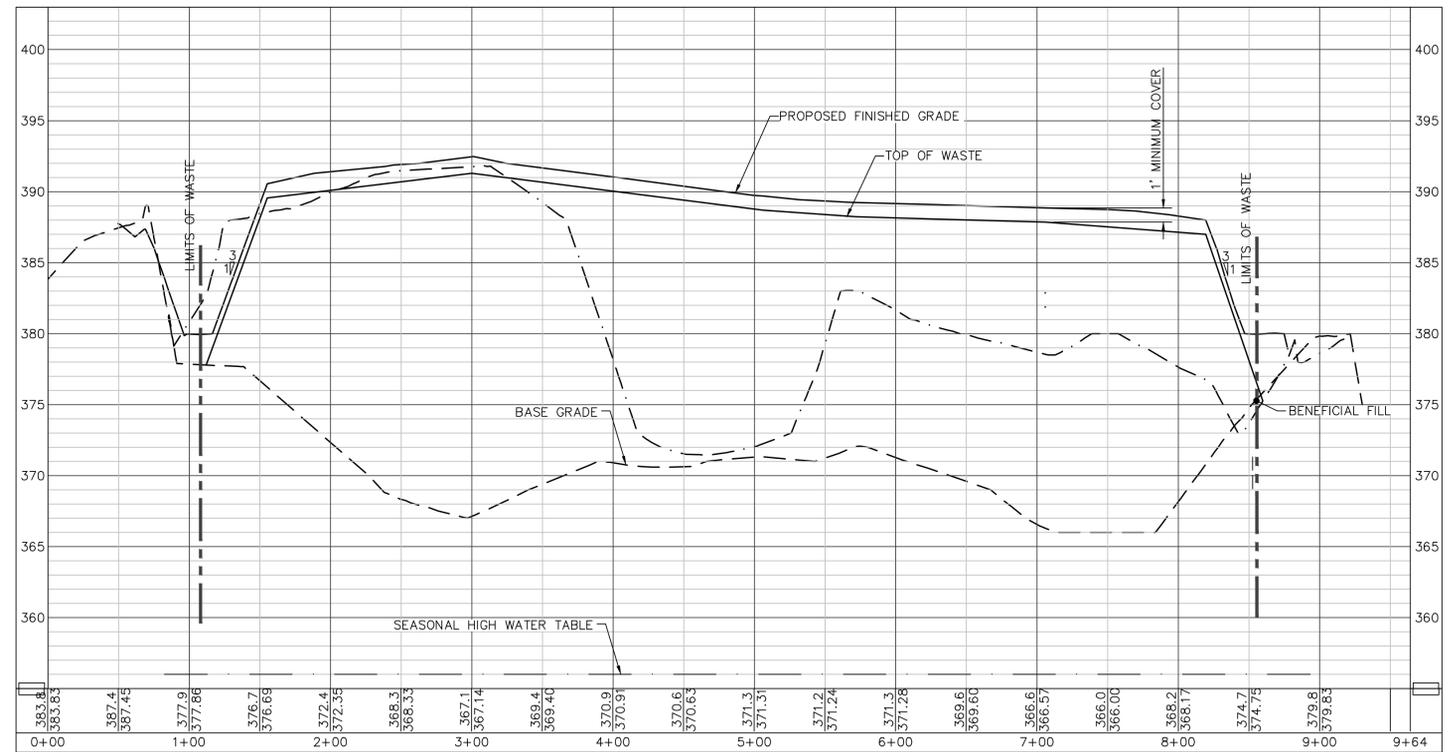
2017 14499N-01G.DWG (R) HARNETT COUNTY, NC. DATE: 03/01/2016 10:48:23 AM



SECTION A-A
 HORIZONTAL SCALE: 1" = 60'
 VERTICAL SCALE: 1" = 6'



SECTION B-B
 HORIZONTAL SCALE: 1" = 60'
 VERTICAL SCALE: 1" = 6'



SECTION C-C
 HORIZONTAL SCALE: 1" = 60'
 VERTICAL SCALE: 1" = 6'



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SECTIONS
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 HARNETT COUNTY, NORTH CAROLINA

REVISIONS
 3.1.16
 CELL 2 ASBUILT AND
 OPERATIONAL NOTE UPDATE

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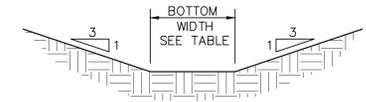
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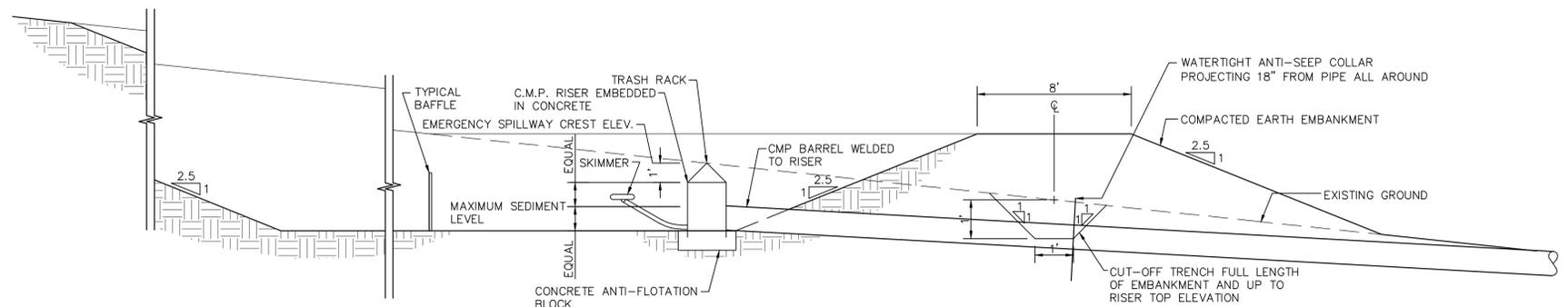
DETAILS
WEEKS SANDPIT No.2 LCID LANDFILL
 HARNETT COUNTY, NORTH CAROLINA

REVISIONS	
3.1.16	CELL 2 ASBUILT AND OPERATIONAL NOTE UPDATE
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5	



BASIN #	BOTTOM WIDTH
1	5'
2	4'
3	5'
4	5'
5	5'
6	10'
7	4'
8	4'

SECTION AT EMERGENCY SPILLWAY



CROSS SECTION

SPECIFICATIONS

- SITE PREPARATIONS** - CLEAR, GRUB, AND STRIP TOPSOIL FROM AREAS UNDER THE EMBANKMENT TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. DELAY CLEARING THE POOL AREA UNTIL THE DAM IS COMPLETE AND THEN REMOVE BRUSH, TREES, AND OTHER OBJECTIONABLE MATERIALS TO FACILITATE SEDIMENT CLEANOUT. STOCKPILE ALL TOPSOIL OR SOIL CONTAINING ORGANIC MATTER FOR USE ON THE OUTER SHELL OF THE EMBANKMENT TO FACILITATE VEGETATIVE ESTABLISHMENT. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW THE BASIN AS NEEDED.
- CUT-OFF TRENCH** - EXCAVATE A CUT-OFF TRENCH ALONG THE CENTER LINE OF THE EARTH FILL EMBANKMENT. CUT THE TRENCH TO STABLE SOIL MATERIAL, BUT IN NO CASE MAKE IT LESS THAN 2 FEET DEEP. THE CUT-OFF TRENCH MUST EXTEND INTO BOTH ABUTMENTS TO AT LEAST THE ELEVATION OF THE RISER CREST, OR THE SPILLWAY CREST IF THERE IS NO RISER. MAKE THE MINIMUM BOTTOM WIDTH WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT, BUT IN NO CASE LESS THAN 2 FEET. MAKE SIDE SLOPES OF THE TRENCH NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS ARE THE SAME AS THOSE FOR THE EMBANKMENT. KEEP THE TRENCH DRY DURING BACKFILLING AND COMPACTION OPERATIONS.
- EMBANKMENT** - TAKE FILL MATERIAL FROM THE APPROVED AREAS SHOWN ON THE PLANS. IT SHOULD BE CLEAN MINERAL SOIL, FREE OF ROOTS, WOODY VEGETATION, ROCKS, AND OTHER OBJECTIONABLE MATERIAL. SCARIFY AREAS ON WHICH FILL IS TO BE PLACED BEFORE PLACING FILL. THE FILL MATERIAL MUST CONTAIN SUFFICIENT MOISTURE SO IT CAN BE FORMED BY HAND INTO A BALL WITHOUT

- CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL IT IS TOO WET FOR PROPER COMPACTION. PLACE FILL MATERIAL IN 6 TO 8 INCH CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL AREA AND COMPACT IT. COMPACTION MAY BE OBTAINED BY ROUTING THE CONSTRUCTION HAULING EQUIPMENT OVER THE FILL TO THAT THE ENTIRE SURFACE OF EACH LAYER IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF HEAVY EQUIPMENT, OR A COMPACTOR MAY BE USED. CONSTRUCT THE EMBANKMENT TO AN ELEVATION 10 PERCENT HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLING.
- CONDUIT SPILLWAYS** - SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATERTIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN BARREL SECTIONS BY APPROVED WATERTIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS, AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES.

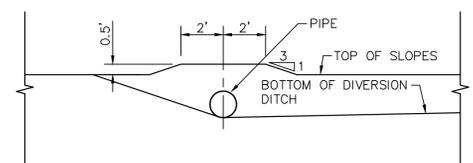
- EMERGENCY SPILLWAY** - INSTALL THE EMERGENCY SPILLWAY IN UNDISTURBED SOIL. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE EMERGENCY SPILLWAY.
- INLETS** - DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL TO IMPROVE BASIN TRAP EFFICIENCY.
- EROSION CONTROL** - CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED, DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION.

MAINTENANCE
 INSPECT TEMPORARY SEDIMENT BASINS AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT, AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AREAS WITH SEDIMENT CONTROLS.

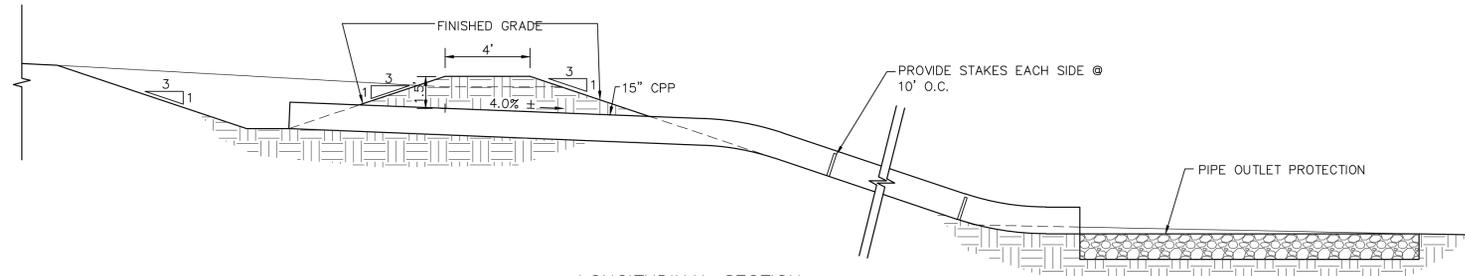
CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.

SEDIMENT BASIN DETAIL

SCALE: 1/4" = 1'-0"



CROSS SECTION



LONGITUDINAL SECTION

SPECIFICATIONS

A COMMON FAILURE OF SLOPE DRAINS IS CAUSED BY WATER SATURATING THE SOIL AND SEEPING ALONG THE PIPE. THIS CREATES VOIDS FROM CONSOLIDATION AND PIPING AND CAUSES WASHOUTS. PROPER BACKFILLING AROUND AND UNDER THE PIPE 'HAUNCHES' WITH STABLE SOIL MATERIAL AND HAND COMPACTING IN 6-INCH LIFTS TO ACHIEVE FIRM CONTACT BETWEEN THE PIPE AND THE SOIL AT ALL POINTS WILL ELIMINATE THIS TYPE OF FAILURE.

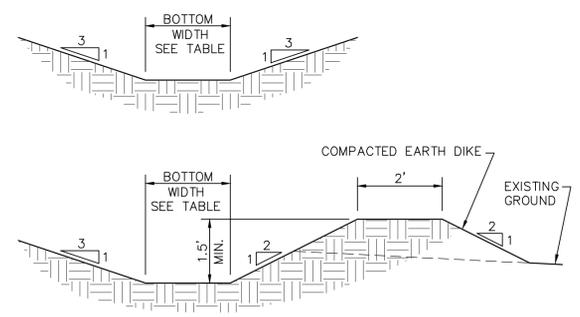
- PLACE SLOPE DRAINS ON UNDISTURBED SOIL OR WELL COMPACTED FILL AT LOCATIONS AND ELEVATIONS SHOWN ON THE PLAN.
- SLIGHTLY SLOPE THE SECTION OF PIPE UNDER THE DIKE TOWARD ITS OUTLET.
- HAND TAMP THE SOIL UNDER AND AROUND THE ENTRANCE SECTION IN LIFTS NOT TO EXCEED 6 INCHES.
- ENSURE THAT ALL SLOPE DRAIN CONNECTIONS ARE WATERTIGHT.

- ENSURE THAT ALL FILL MATERIAL IS WELL COMPACTED.
- ADEQUATELY PROTECT THE DRAIN OUTLET FROM EROSION.
- MAKE THE SETTLED, COMPACTED DIKE RIDGE NO LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AT EVERY POINT.
- IMMEDIATELY STABILIZE ALL DISTURBED AREAS FOLLOWING CONSTRUCTION.

MAINTENANCE
 INSPECT THE SLOPE DRAIN AND SUPPORTING DIVERSION AFTER EVERY RAINFALL, AND PROMPTLY MAKE NECESSARY REPAIRS. WHEN THE PROTECTED AREA HAS BEEN PERMANENTLY STABILIZED, TEMPORARY MEASURES MAY BE REMOVED, MATERIALS DISPOSED OF PROPERLY, AND ALL DISTURBED AREAS STABILIZED APPROPRIATELY.

SD SLOPE DRAIN DETAIL

SCALE: 1/4" = 1'-0"



DIVERSION DITCH DETAIL

SCALE: 1/2" = 1'-0"

DITCH #	BOTTOM WIDTH
1	4'
2	3'
3	6'
4	3'
5	6.5'
6a	2'
6b	2'
6c	8'
6d	11'

CONSTRUCTION

- REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS OR OTHER OBJECTIONABLE MATERIAL. FILL AND COMPACT ALL DITCHES, SWALES OR GULLIES THAT WILL BE CROSSED TO NATURAL GROUND LEVEL OR ABOVE.
- JUST BEFORE PLACEMENT OF FILL, THE BASE OF THE RIDGE SHOULD BE DISKED BY MACHINERY.
- EXCAVATE, SHAPE AND STABILIZE THE DIVERSION TO LINE, GRADE AND CROSS SECTION, AS SHOWN ON THE DRAWINGS.
- COMPACT THE RIDGE TO PREVENT UNEQUAL SETTLEMENT AND TO PROVIDE STABILITY AGAINST SEEPAGE.
- VEGETATIVELY STABILIZE THE DIVERSION.

MAINTENANCE

- INSPECT PERMANENT DIVERSIONS AFTER EVERY RAINFALL DURING THE CONSTRUCTION OPERATION. IMMEDIATELY REMOVE ANY OBSTRUCTIONS FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. MAINTAIN THE VEGETATION IN A VIGOROUS, HEALTHY CONDITION AT ALL TIMES.

2011 4:00 PM HARNETT COUNTY, NORTH CAROLINA LANDFILL.dwg, March 29, 2016 4:00:37 PM