



US Army Corps
of Engineers®
Little Rock District

JOINT PUBLIC NOTICE

CORPS OF ENGINEERS – STATE OF ARKANSAS

Application Number: SWL-2012-00244-1

Date: September 22, 2014

Comments Due: October 17, 2014

TO WHOM IT MAY CONCERN: **Comments are invited on the work described below. Please see the Public Involvement section for details on submitting comments.**

Point of Contact. If additional information is desired, please contact the project manager, Lisa Boyle, telephone number: (501) 324-5295, mailing address: Little Rock District Corps of Engineers, Regulatory Division, PO Box 867, Little Rock, Arkansas 72203-0867, email address: Lisa.A.Boyle@usace.army.mil

Project Information. Pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344), notice is hereby given that

**Mr. Mike Kemp
City of Shannon Hills
10401 High Street
Shannon Hills, Arkansas 72103**

has requested authorization for the placement of dredged and fill material in waters of the United States associated with construction of a 460,000-cubic-foot detention basin and drainage improvements to the creek downstream utilizing various techniques, alternating reshaping the earthen stream bed and constructing a 3-foot-wide concrete bed with riprap along the banks. The total length of the proposed project is approximately 3,000 linear feet. The proposed project is located in an intermittent unnamed tributary of Otter Creek, in section 21, T. 1 S., R. 13 W., Shannon Hills, Saline County, Arkansas.

The basic purpose of the project is flood control. The overall purpose of the project is to alleviate flooding of residences in a neighborhood between Joan Drive and Clayton Drive within the City of Shannon Hills. The project is water dependent.

The proposed project consists of construction of a detention basin at the base of Alexander Mountain on an unnamed tributary to Otter Creek, which will collect and slowly release storm water. Downstream of this detention basin, the proposal includes reshaping the existing channelized stream. Please see Sheets 1 and 2 of 25 for specific information regarding the stream stabilization methods.

The stream enters the project area at the base of Alexander Mountain in the utility right-of-way. The channel is naturally sinuous throughout, but due to the utility right-of-way the riparian corridor is limited to herbaceous plants. Within the neighborhood, the stream has been straightened and channelized, though there are numerous trees throughout.

As compensatory mitigation, the applicant proposes restoration and enhancement of the stream. Bank stabilization would be achieved by reshaping the typical stream section to moderate side slopes and installing stone in areas of high potential for erosion. Avoidance and minimization has been achieved by largely maintaining the existing alignment of the stream, utilizing temporary erosion control measures during construction, and ensuring that no construction activities would take place just prior to, during or immediately following a rain event until all water has discharged from the stream.

The location and general plan for the proposed work are shown on the enclosed sheets.

Water Quality Certification. By copy of this public notice, the applicant is requesting water quality certification from the Arkansas Department of Environmental Quality (ADEQ) in accordance with Section 401(a)(1) of the Clean Water Act. Upon completion of the comment period and a public hearing, if held, a determination relative to water quality certification will be made. Evidence of this water quality certification or waiver of the right to certify must be submitted prior to the issuance of a Corps of Engineers permit.

Cultural Resources. A Corps staff archeologist will review topographic maps, the National Register of Historic Places, and other data on reported sites in the area. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area.

Endangered Species. Our preliminary determination is that the proposed activity will not affect listed Endangered Species or their critical habitat. A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies and constitutes a request to those agencies for information on whether any listed or proposed-to-be-listed endangered or threatened species may be present in the area which would be affected by the proposed activity.

Flood Plain. We are providing copies of this notice to appropriate flood plain officials in accordance with 44 CFR Part 60 (Flood Plain Management Regulations Criteria for Land Management and Use) and Executive Order 11988 on Flood Plain Management.

Section 404(b)(1) Guidelines. The evaluation of activities to be authorized under this permit which involves the discharge of dredged or fill material will include application of guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. These guidelines are contained in 40 Code of Federal Regulations (CFR) 230.

Public Involvement. Any interested party is invited to submit to the above-listed POC written comments or objections relative to the proposed work on or before **October 17, 2014**. Substantive comments, both favorable and unfavorable, will be accepted and made a part of the record and will receive full consideration in determining whether this work would be in the public interest. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important

resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request in writing within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed for making a decision.

NOTE: The mailing list for this Public Notice is arranged by state and county(s) where the project is located, and also includes any addressees who have asked to receive copies of all public notices. Please discard notices that are not of interest to you. If you have no need for any of these notices, please advise us so that your name can be removed from the mailing list.

Enclosures

Approximate Coordinates of Project Center

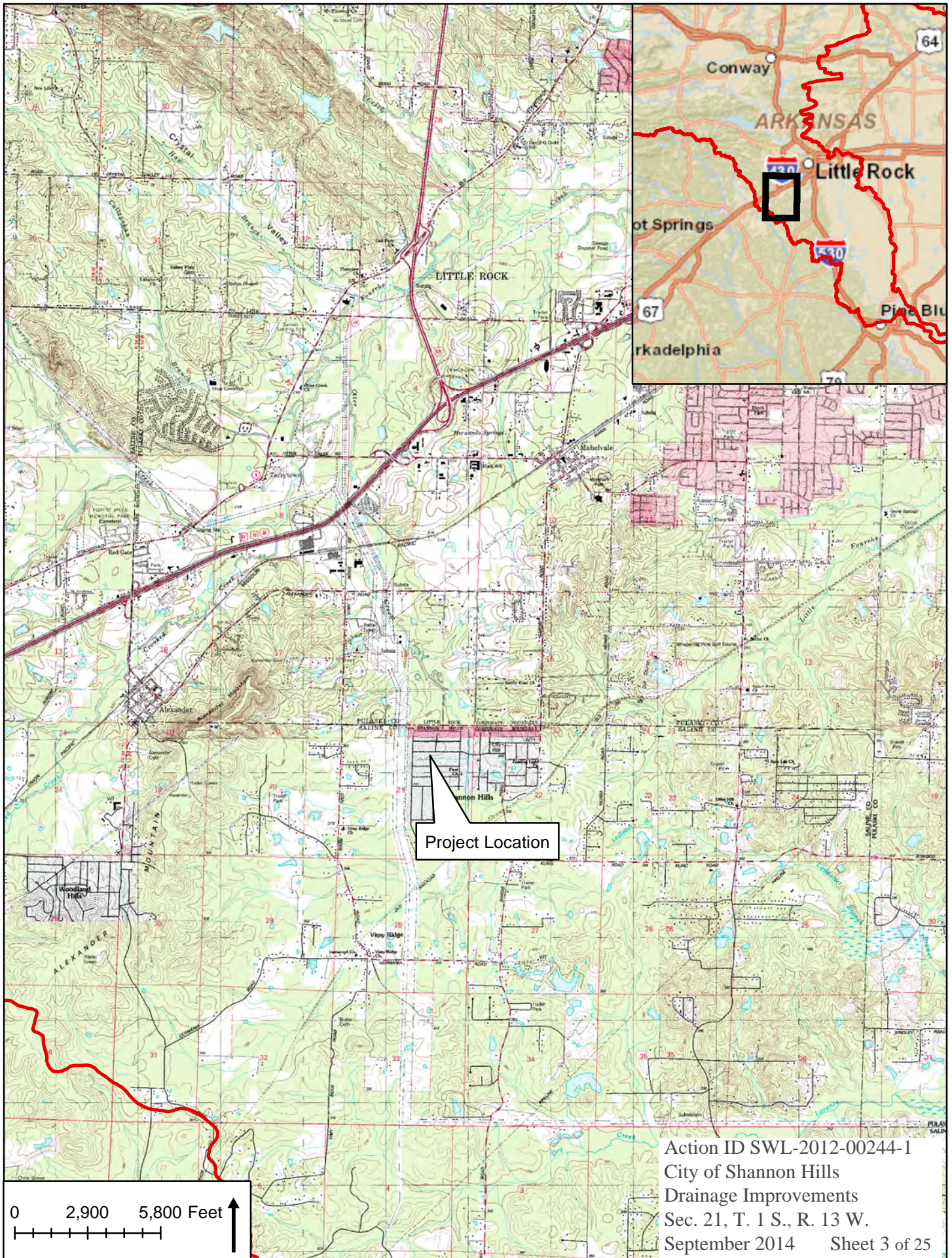
Latitude: **34.622804** Longitude: **-92.406183**

UTM Zone: **15** North: **3831375** East: **554415**

The following is a station by station description of the proposed rehabilitation of the unnamed tributary of Otter Creek as presented in the plan sheets provided by Lemons Engineering for USACE project review number 2012-00244-1. **(fill material quantities are shown in bold)**

1. From station 0-26 to station 0-6, the existing earthen ditch will be widened at its existing flow-line and grade and Rip Rap stone will be placed to prevent future erosion. **(7"-9" Rip Rap Stone x 5.5 yards)**
2. From station 0-6 to station 0+6, a concrete ford will be built at approximately the existing ditch grade as per the detail shown on page 7 of the plans. **(steel reinforced concrete x 6 yards)**
3. From station 0+6 to station 0+55, Rip Rap will be placed at the entry to the proposed detention basin along the flow-line to prevent erosion as water enters the basin. **(7"-9" Rip Rap Stone x 14 yards)**
4. From station 0+55 to station 0+81, the flow-line of the ditch shall be shaped of native soils and seeded. **(no fill material)**
5. From station 0+81 to station 2+81, the flow-line of the channel shall be constructed of a 5' wide concrete "trickle channel." This concrete serves to allow the detention basin to completely drain following a rain event and provides a benchmark for the City to maintain the basin. **(concrete x 9.3 yards)**
6. From station 2+81 to station 3+10, the channel shall flow through the proposed concrete discharge structure for the detention basin as per the design on page 7 of the plans. **(concrete x 15 yards)**
7. From station 3+10 to station 3+34, Rip Rap stone will be installed in the flow-line following the discharge structure to prevent erosion of the soil during high flow leaving the detention basin. **(7"-9" Rip Rap Stone x 7 yards)**
8. From station 3+34 to station 4+25, the channel shall maintain its approximate natural elevation and be widened to a flat bottom earthen ditch section as shall be typical throughout the majority of the project. **(no fill material)**
9. From station 4+25 to station 5+30, the channel shall receive a 3' wide concrete floor with Rip Rap stone side walls in order to prevent erosion and maintain consistency of grade through a sharp bend in the channel. **(concrete x 3 yards & 7"-9" rip rap stone x 12 yards)**
10. From station 5+30 to 6+49, the channel shall be earthen and shaped as represented in Section C-C on sheet 6 of the plans. **(no fill material)**
11. From station 6+49 to station 6+99, the channel shall pass through a proposed concrete box culvert which shall replace an existing box culvert on Joan Street.
12. From station 6+93 to station 8+10, the channel shall be earthen and shaped as represented in Section E-E of the plans. **(no fill material)**
13. From station 8+10 to station 9+10, the channel shall receive a 3' wide concrete floor with Rip Rap stone side walls in order to prevent erosion and maintain consistency of grade through a sharp bend in the channel. **(concrete x 3 yards & 7"-9" rip rap stone x 12 yards)**
14. From station 9+10 to station 9+90, the channel shall be earthen. **(no fill material)**
15. From station 9+90 to station 10+44, the channel shall receive a 3' wide concrete floor with Rip Rap stone side walls. **(concrete x 1.5 yards & 7"-9" rip rap stone x 6 yards)**

16. From station 10+44 to station 10+95, the channel shall be earthen reference Section F-F on sheet 6 of the plans. **(no fill material)**
17. From station 10+95 to station 11+55, the channel shall receive a 3' wide concrete floor with Rip Rap stone side walls. **(concrete x 1.5 yards & 7"-9" rip rap stone x 6 yards)**
18. From station 11+55 to station 27+65, the channel shall be earthen as represented in Sections F-F and G-G on sheet 6 of the plans. **(no fill material)**
19. From station 27+21 to 27+65, the channel shall pass through a proposed concrete box culvert which shall replace an existing box culvert on Clayton Drive.
20. From station 27+65 to station 29+32, the channel shall be earthen. **(no fill material)**
21. From station 29+32 to station 29+52, the channel shall pass through a proposed concrete diffuser as detailed on page 7 of the plans. This diffuser shall disperse and reduce velocity of the storm water as it enters Otter Creek. **(concrete x 15 yards)**
22. From station 29+52 to station 29+72, Rip Rap stone shall be installed in the channel and the mouth of the channel widened to assist the previous diffuser in preventing the flow of water from eroding Otter Creek. **(7"-9" rip rap stone x 20 yards)**



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DETAILED PLANS:

**CITY OF SHANNON HILLS DRAINAGE IMPROVEMENTS
(DETENTION BASIN, CULVERTS AND
REHABILITATION OF AN UNNAMED TRIBUTARY
OF OTTER CREEK)**

JULY 2013

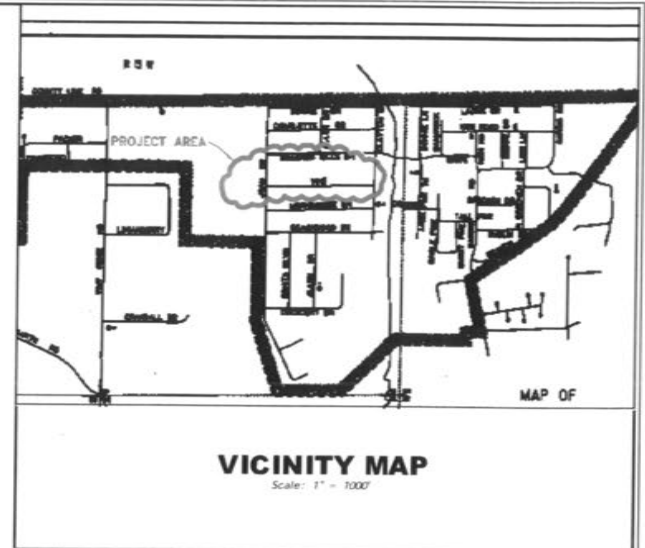


PREPARED FOR:

**CITY OF SHANNON HILLS
10401 HIGH ROAD EAST
SHANNON HILLS, ARKANSAS 72103**



Prepared By:
LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023



MAYOR:

MIKE KEMP

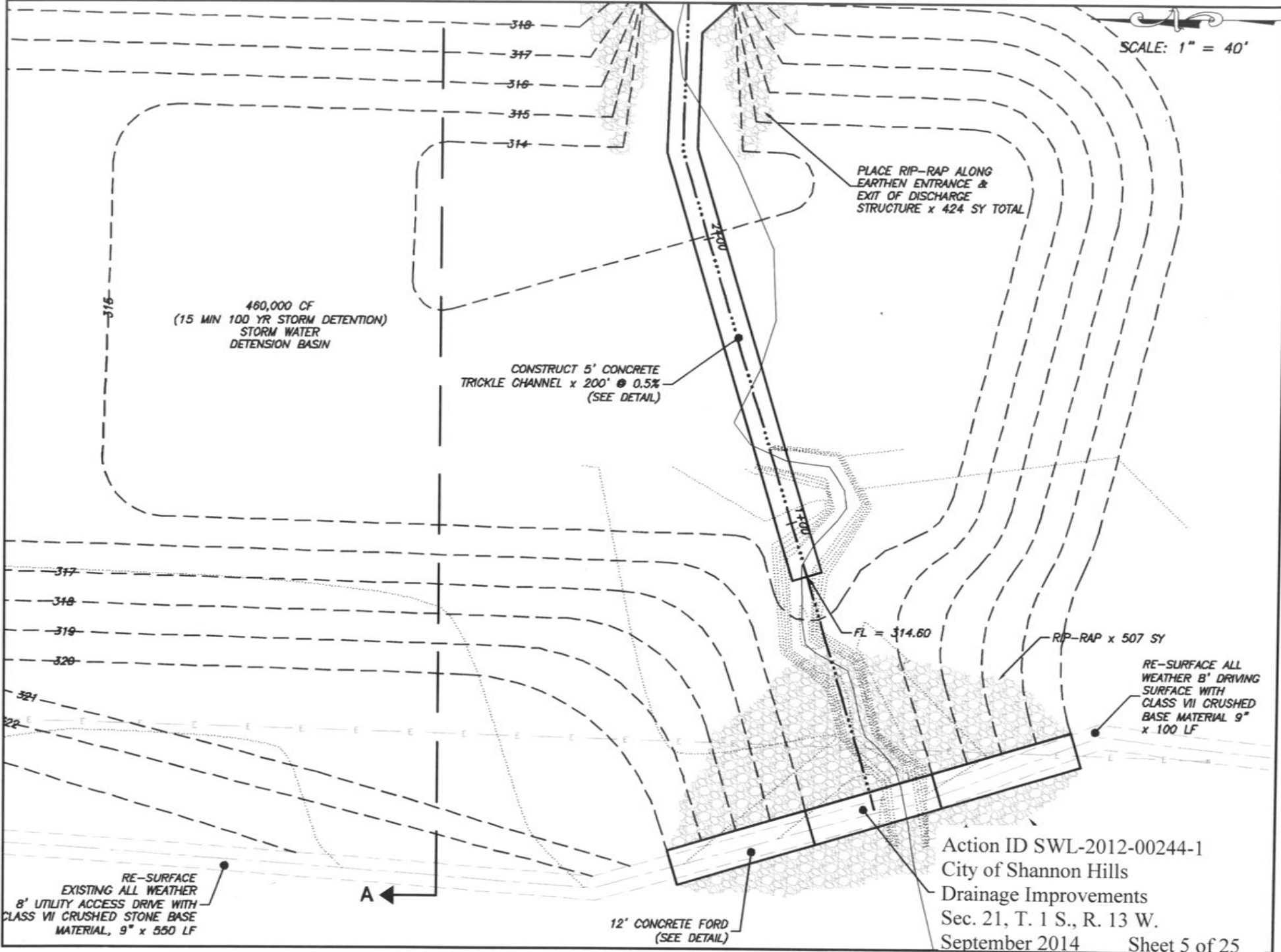
CITY COUNCIL:

SCOTT BENETT, COUNCIL MEMBER
TONY COBB, COUNCIL MEMBER
JAMES FRALA, COUNCIL MEMBER
JILL HATCHER, COUNCIL MEMBER
JAMES KANDBINDER, COUNCIL MEMBER
SUE SKIPPER, COUNCIL MEMBER
ROBIN BAKER, CITY RECORDER
MARY MEYERS, CITY TREASURER
DAVID PASSMORE, MANAGER
PATRICK BENCA, ATTORNEY

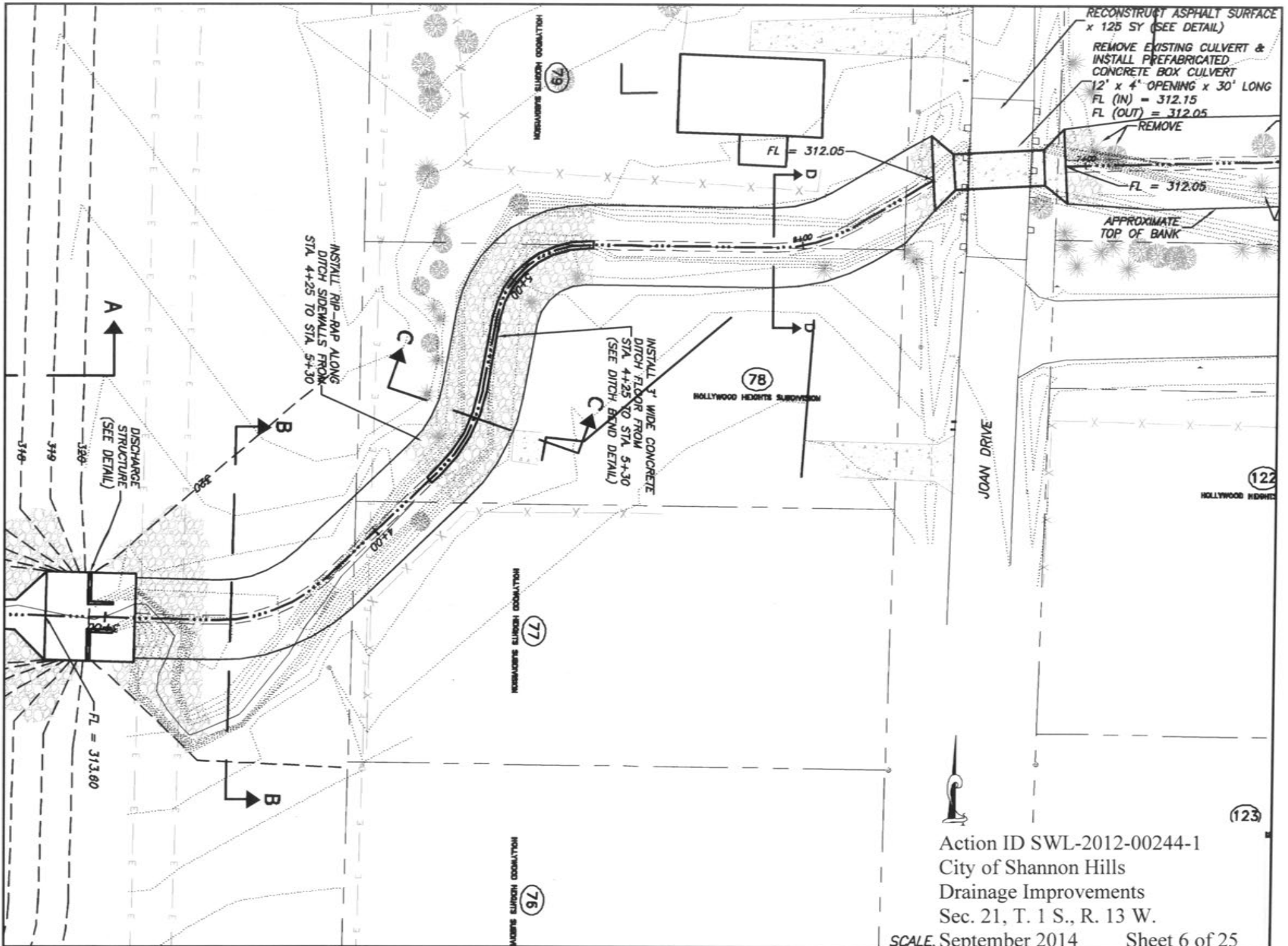
— Action ID SWL-2012-00244-1
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DETENTION
TRIBUTARY
CROSS SEC.
CONSTRUC

SCALE: 1" = 40'



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SHANNON HILLS ANNEX NO. 2

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SHANNON HILLS ANNEX NO. 2

19

SHANNON HILLS ANNEX NO. 2

CONSTRUCT 6' WOOD PRIVACY FENCE x 283'

LIMITS - PROPOSED 30' DRAINAGE & UTILITY EASEMENT

INSTALL RIP-RAP ALONG DITCH SIDEWALLS FROM STA. 10+95 TO STA. 11+55

CONNECT TO EXISTING FENCE REMOVE EXISTING FENCE

CONNECT TO EXISTING FENCE

REMOVE REMOVE

FL = 310.64

FL = 310.43

INSTALL 3' WIDE CONCRETE DITCH FLOOR FROM STA. 10+95 TO STA. 11+55 (SEE CONCRETE DETAIL)

LIMITS - PROPOSED EASEMENT (DESCRIPTION TO BE PROVIDED)

APPROXIMATE TOP OF BANK

INSTALL RIP-RAP ALONG DITCH SIDEWALLS FROM STA. 9+90 TO STA. 10+45

REMOVE

FL = 310.89

APPROXIMATE TOP OF BANK

INSTALL 3' WIDE CONCRETE DITCH FLOOR FROM STA. 9+90 TO STA. 10+45 (SEE CONCRETE DETAIL)

FL = 311.01

LIMITS - PROPOSED 20' DRAINAGE EASEMENT

REMOVE

84

HOLLYWOOD HEIGHTS SUBDIVISION

FL = 311.29

INSTALL 3' WIDE CONCRETE DITCH FLOOR FROM STA. 8+10 TO STA. 9+10 (SEE DITCH BEND DETAIL)

INSTALL RIP-RAP ALONG DITCH SIDEWALLS FROM STA. 8+10 TO STA. 9+10

REMOVE

REMOVE

REMOVE

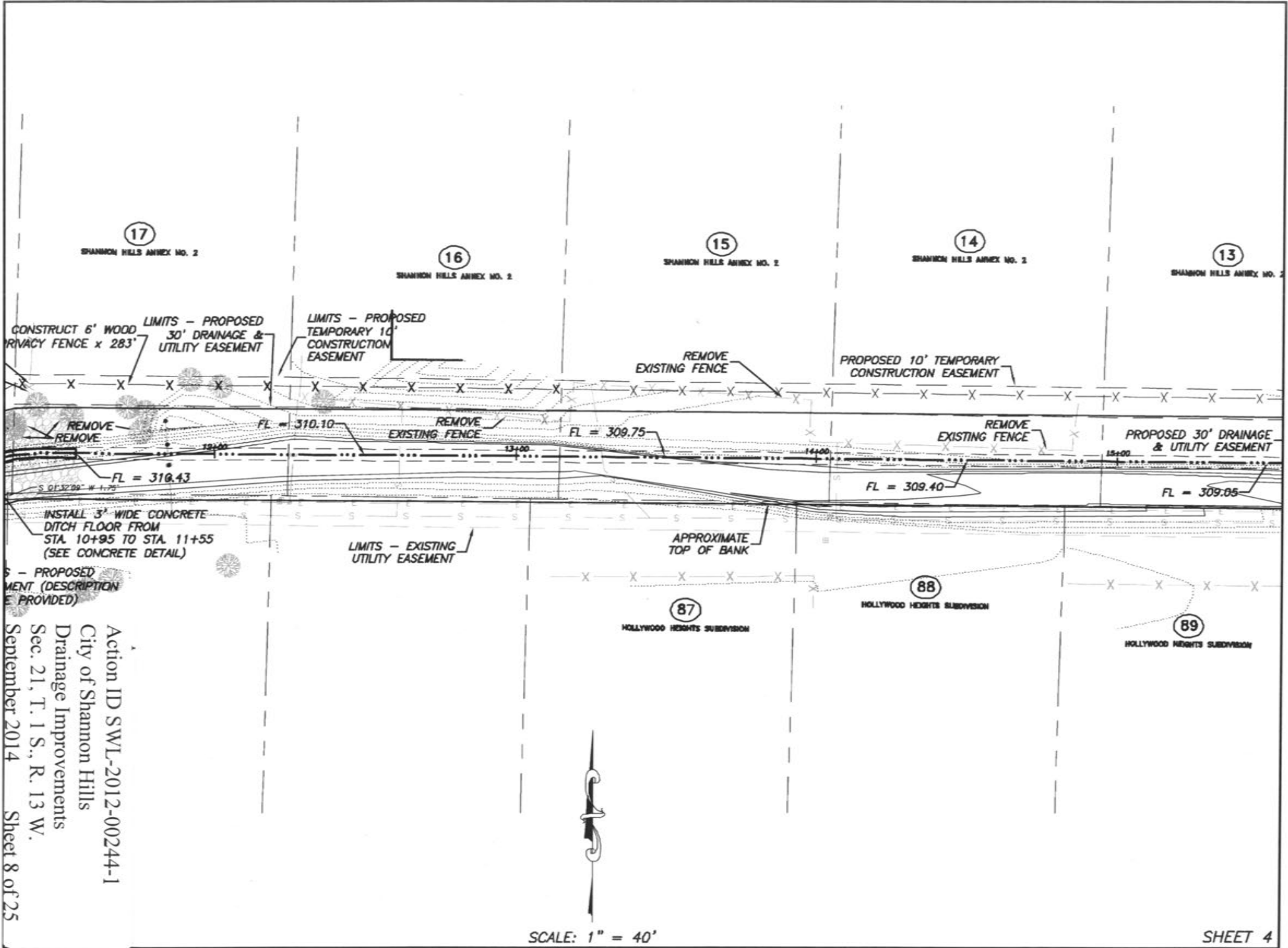
REMOVE

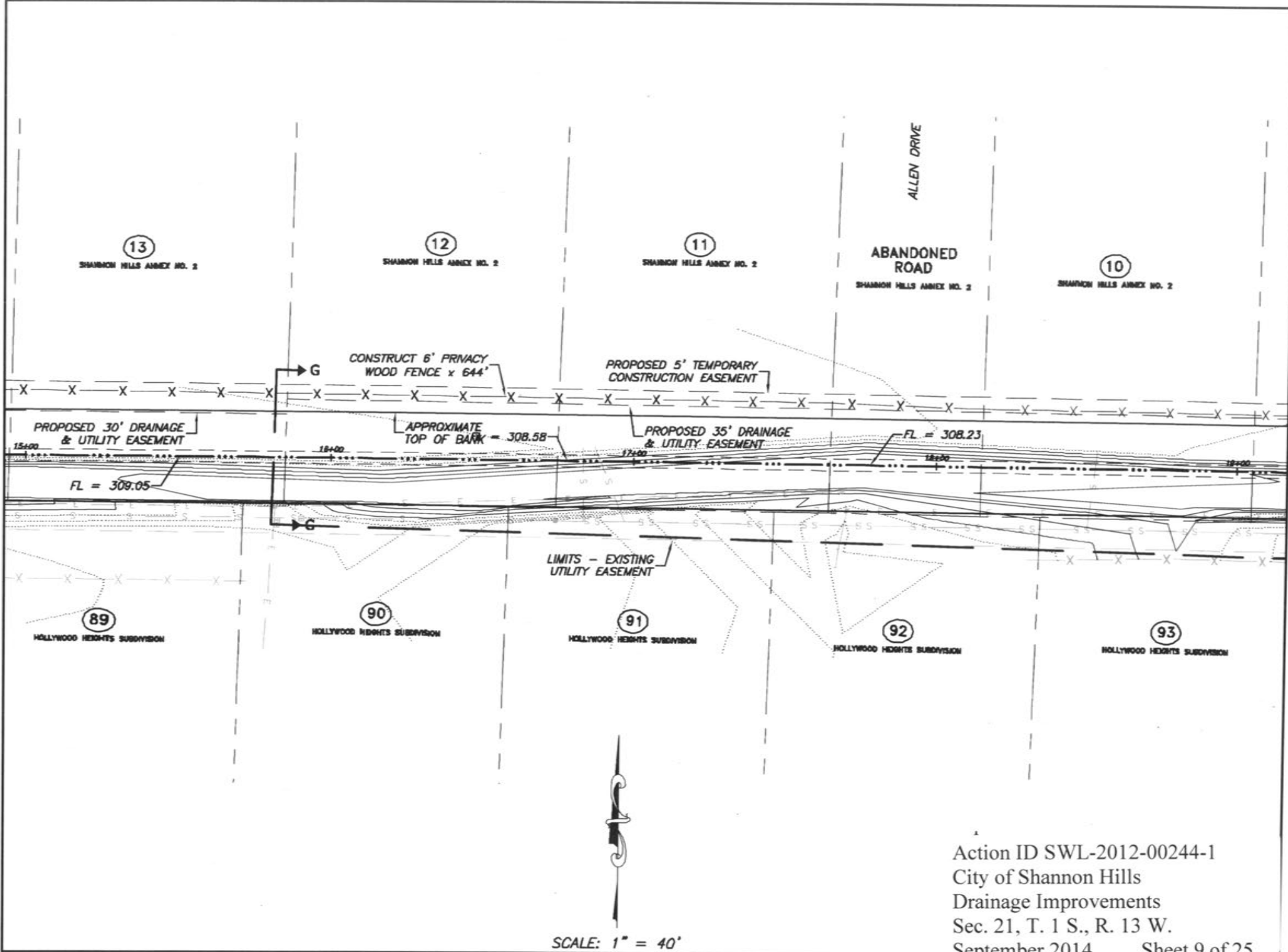
FL = 311.64

REMOVE

VINE STREET

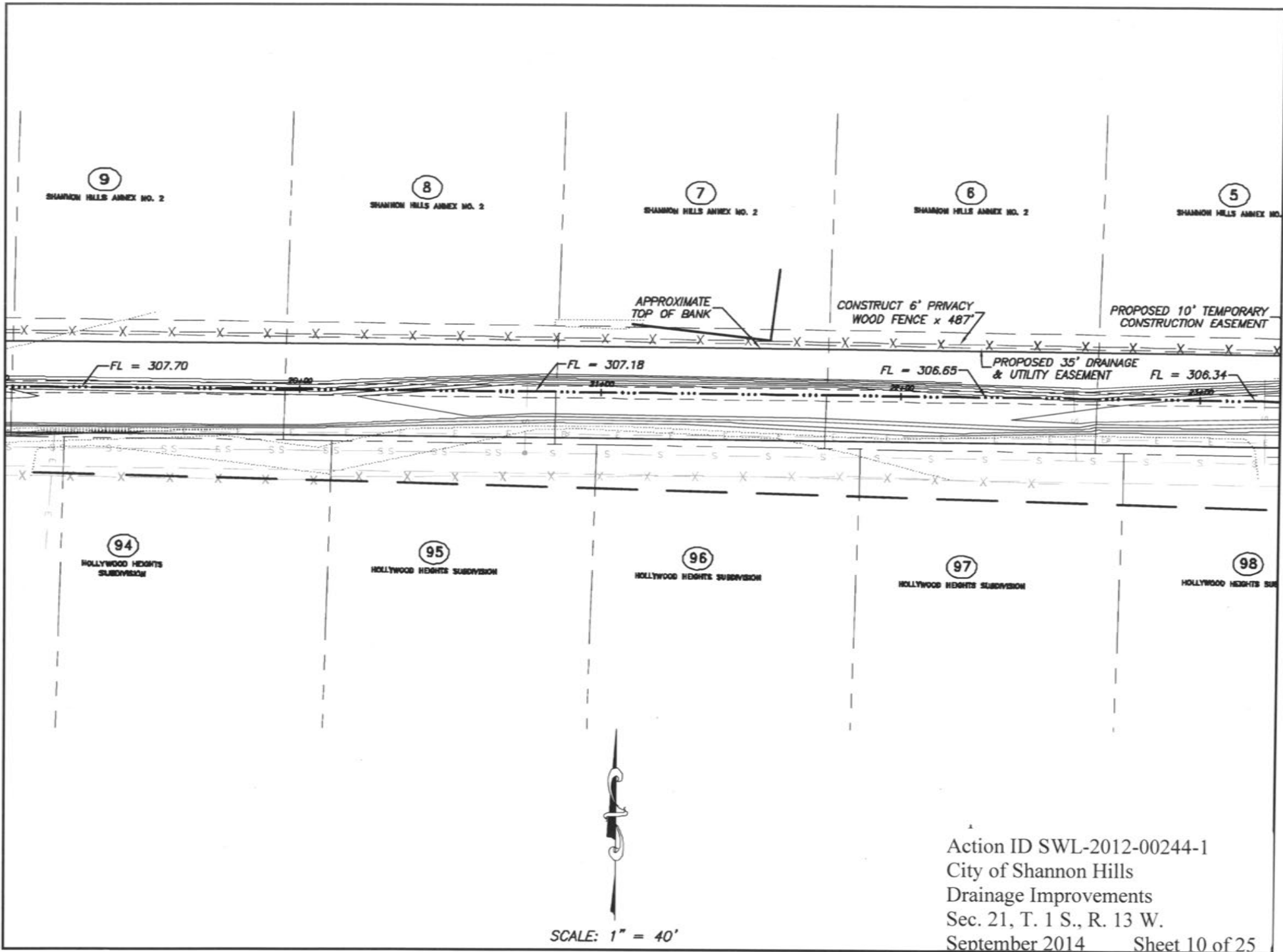
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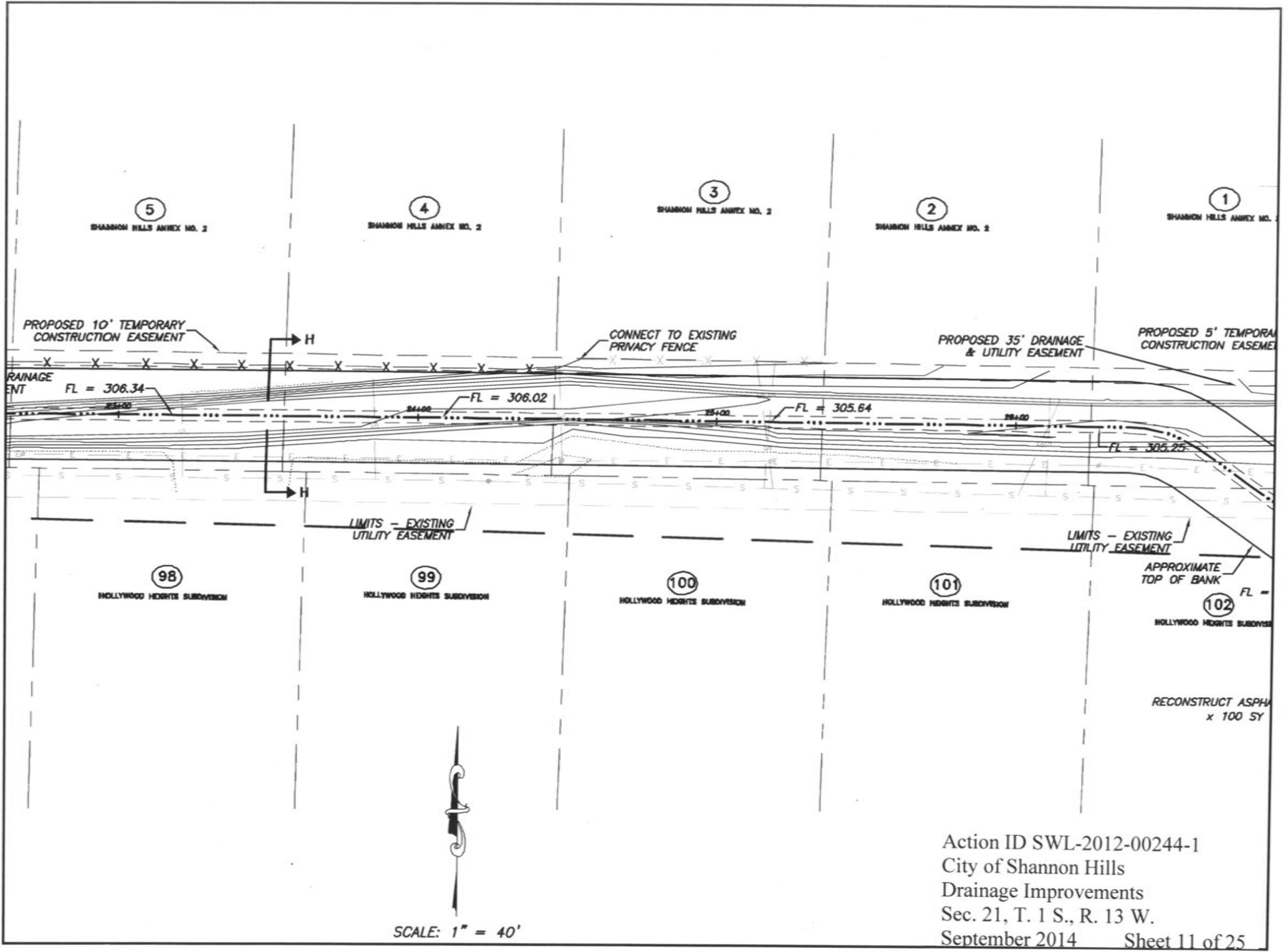




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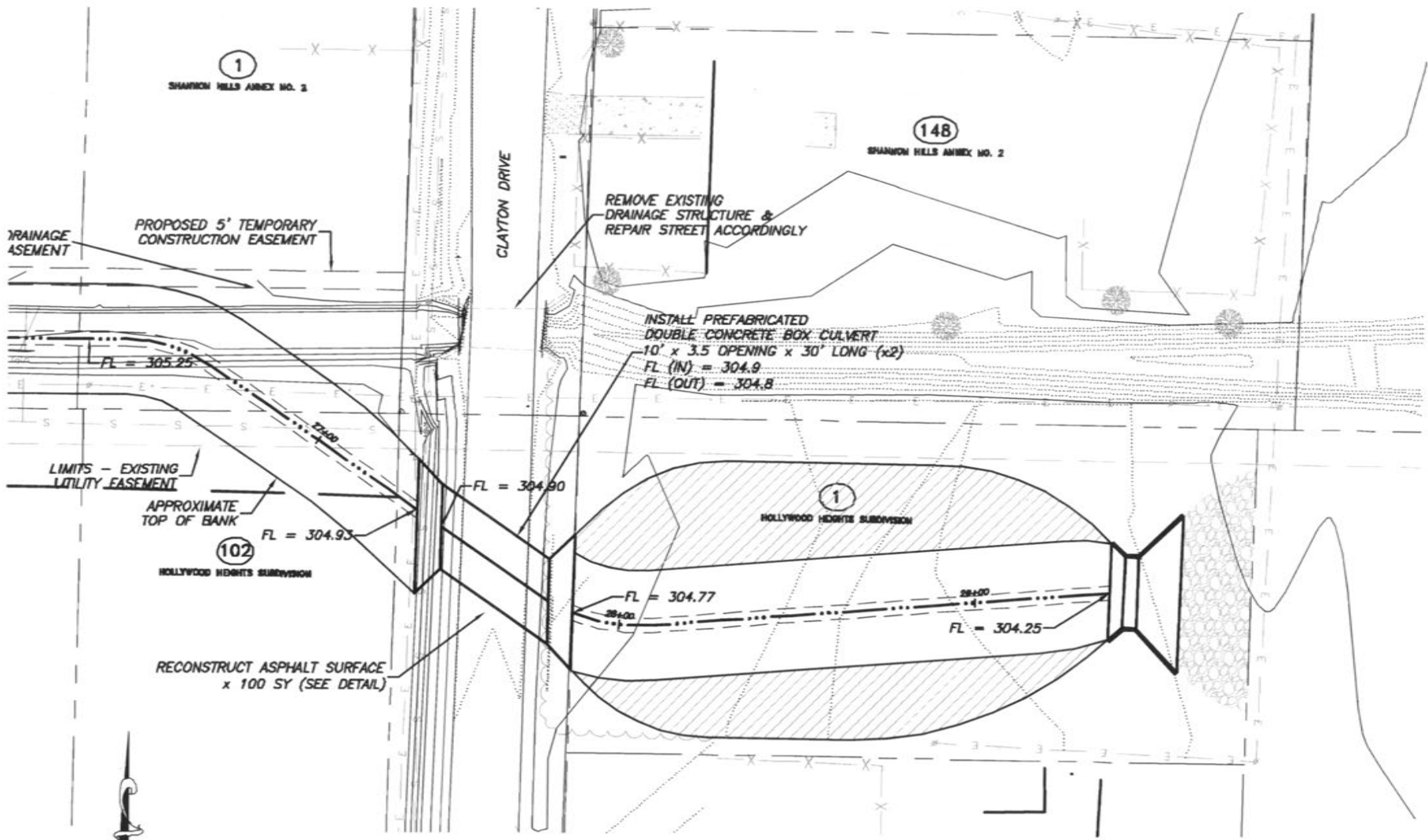
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SCALE: 1" = 40'

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①
SHANNON HILLS ANNEX NO. 2

①48
SHANNON HILLS ANNEX NO. 2

DRAINAGE EASEMENT

PROPOSED 5' TEMPORARY CONSTRUCTION EASEMENT

CLAYTON DRIVE

REMOVE EXISTING DRAINAGE STRUCTURE & REPAIR STREET ACCORDINGLY

INSTALL PREFABRICATED DOUBLE CONCRETE BOX CULVERT
10' x 3.5' OPENING x 30' LONG (x2)
FL (IN) = 304.9
FL (OUT) = 304.8

LIMITS - EXISTING UTILITY EASEMENT

APPROXIMATE TOP OF BANK

①02

HOLLYWOOD HEIGHTS SUBDIVISION

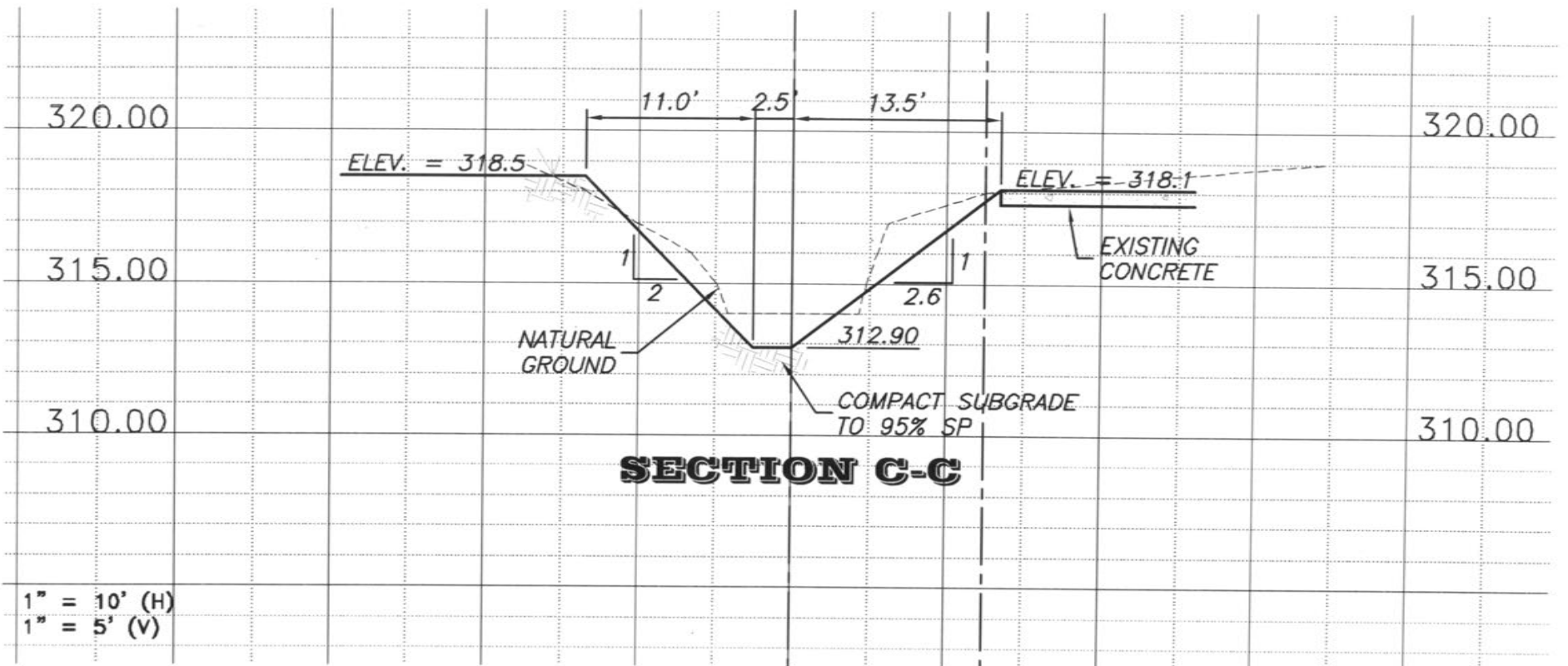
①
HOLLYWOOD HEIGHTS SUBDIVISION

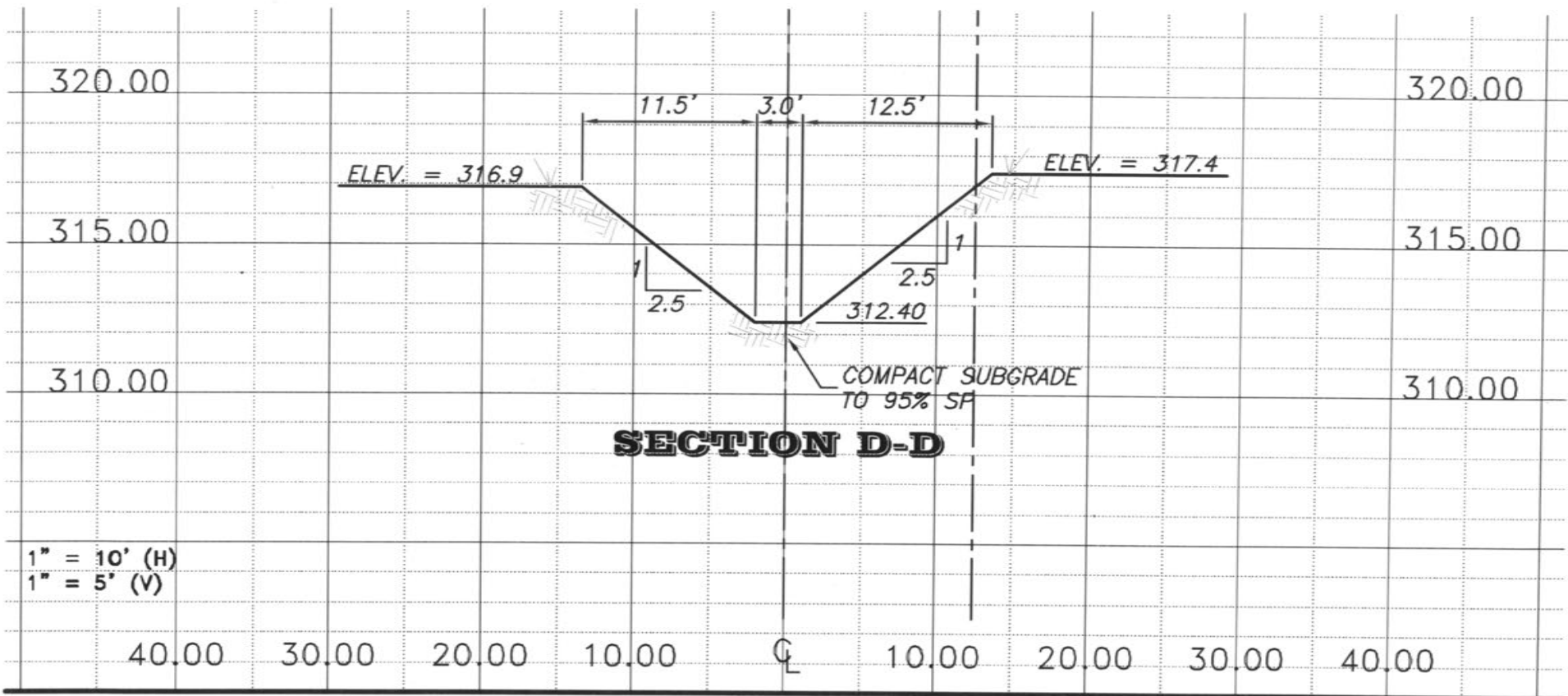
RECONSTRUCT ASPHALT SURFACE x 100 SY (SEE DETAIL)

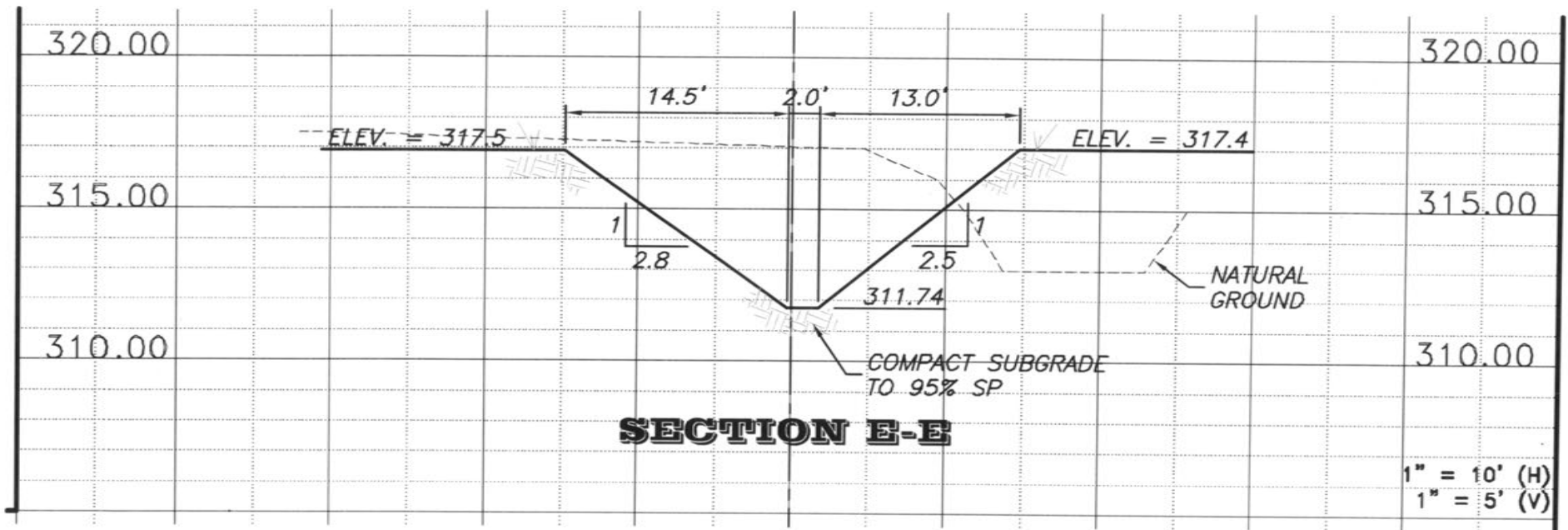


SCALE: 1" = 40'

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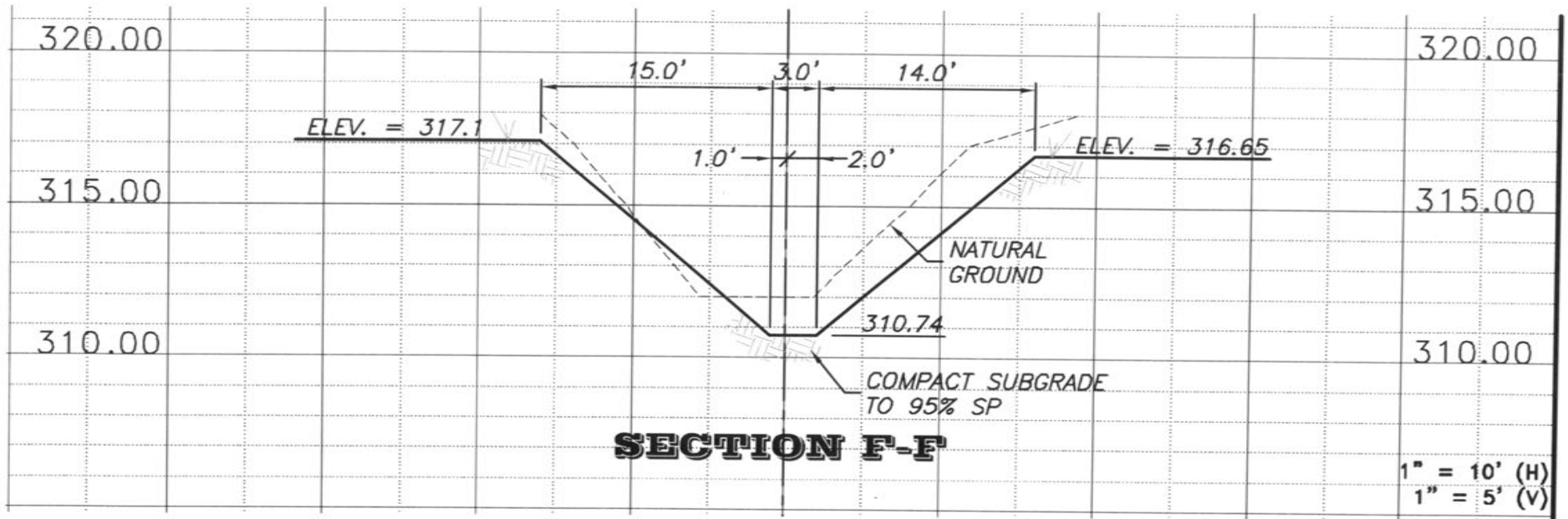


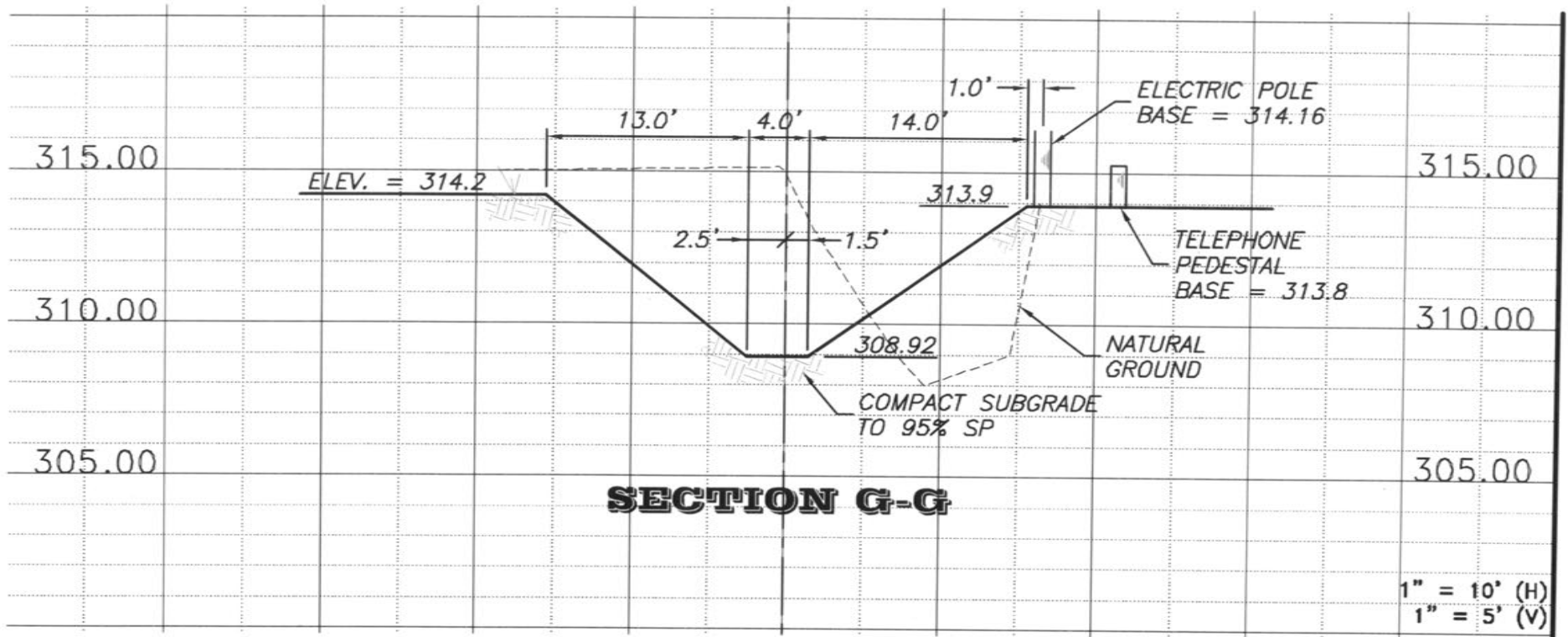


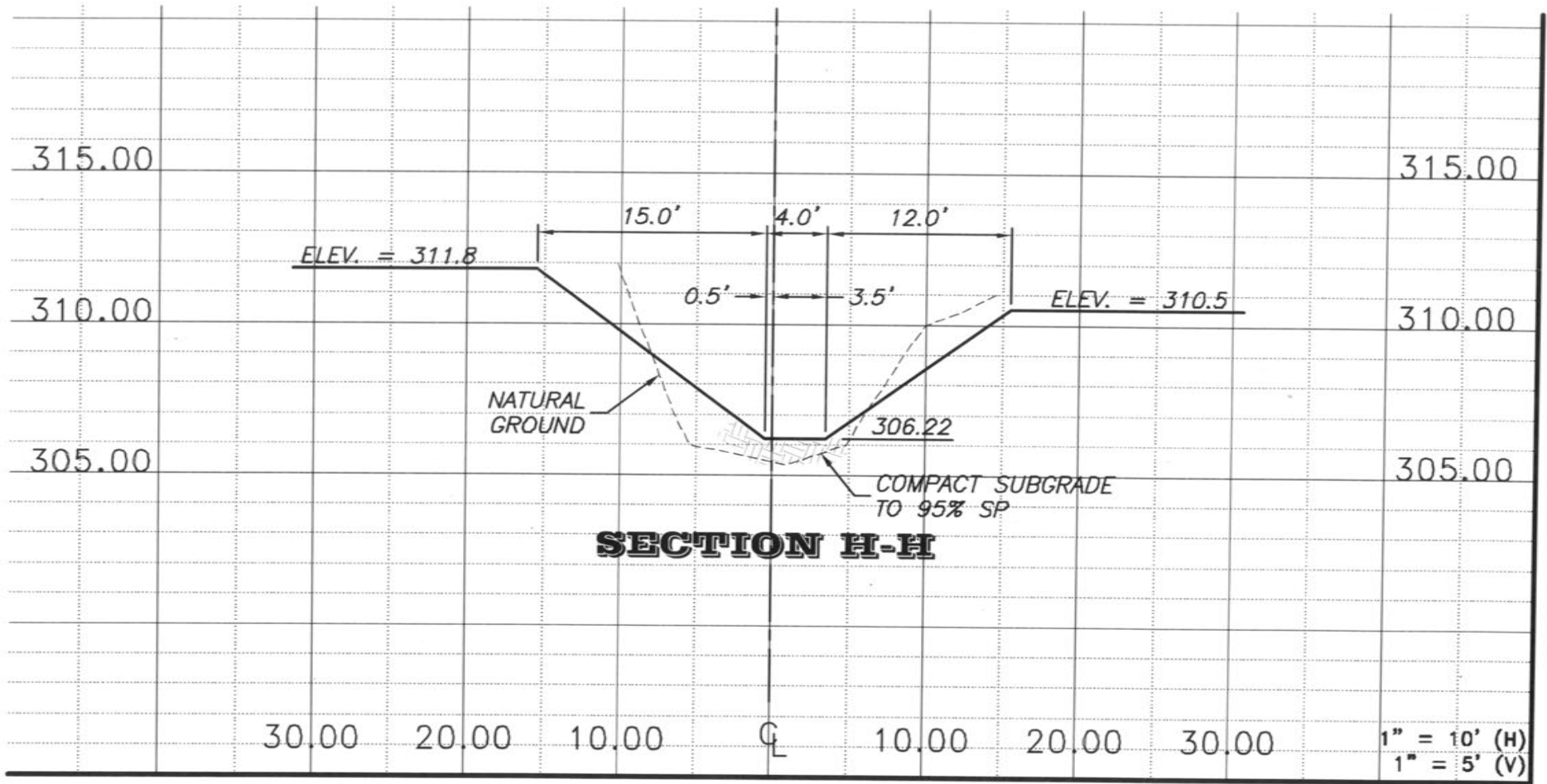


SECTION E-E

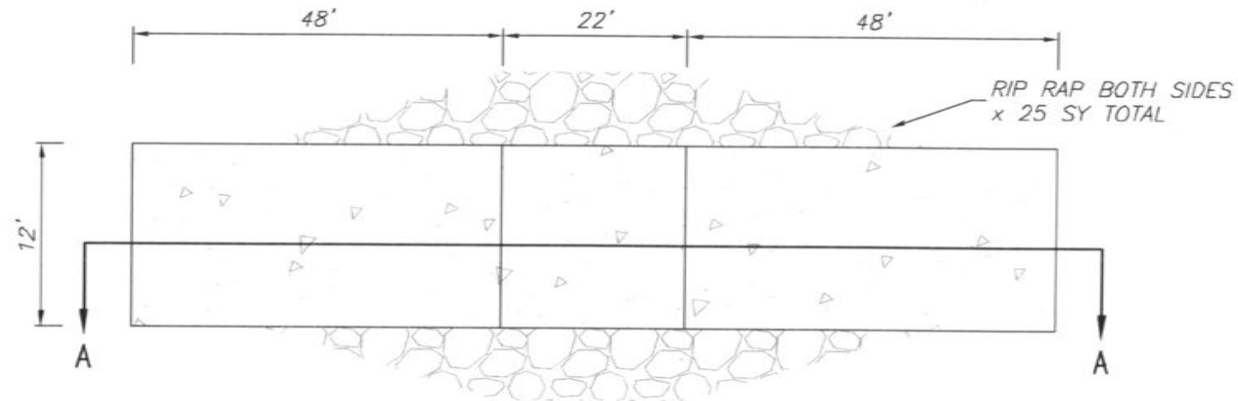
1" = 10' (H)
1" = 5' (V)



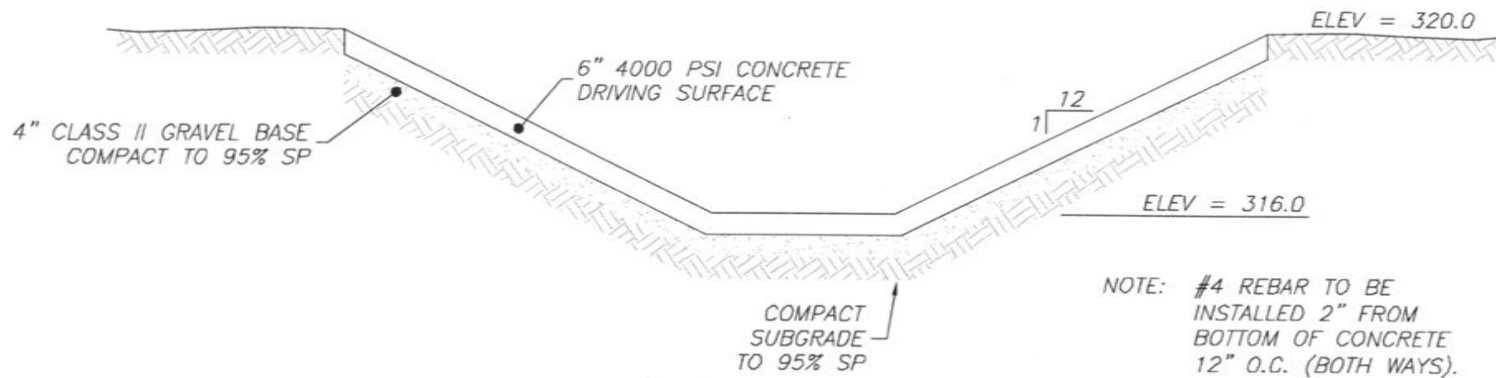




SECTION H-H



PLAN VIEW

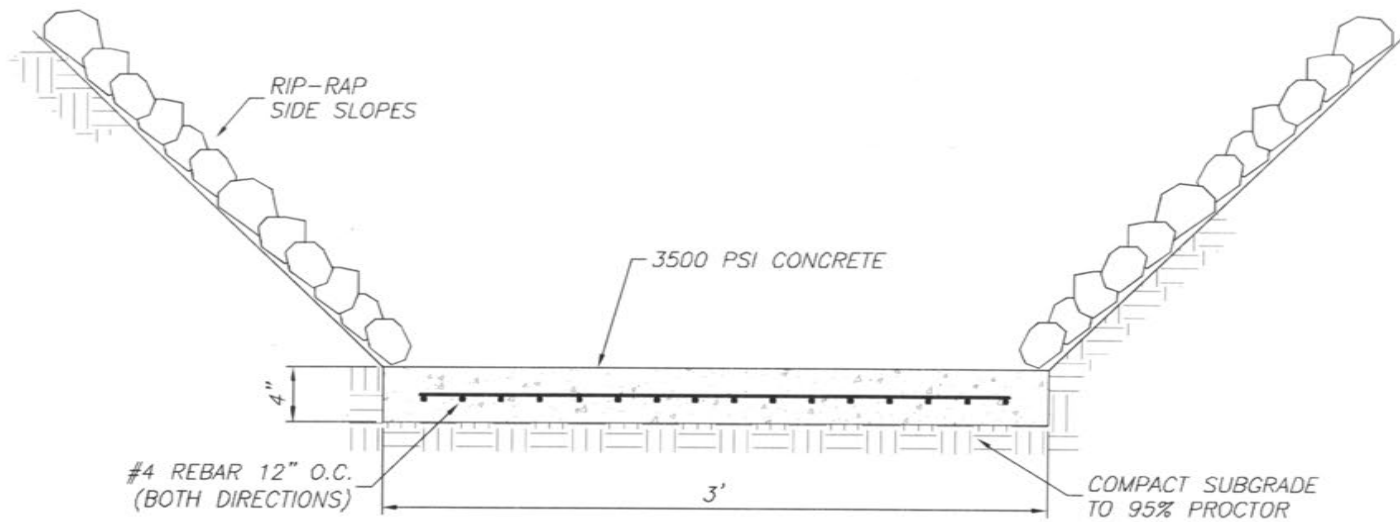


SECTION A-A

DETAIL - POWER LINE R/W FORD

NTS

NOTE: #4 REBAR TO BE
INSTALLED 2" FROM
BOTTOM OF CONCRETE
12" O.C. (BOTH WAYS).



RIP-RAP
SIDE SLOPES

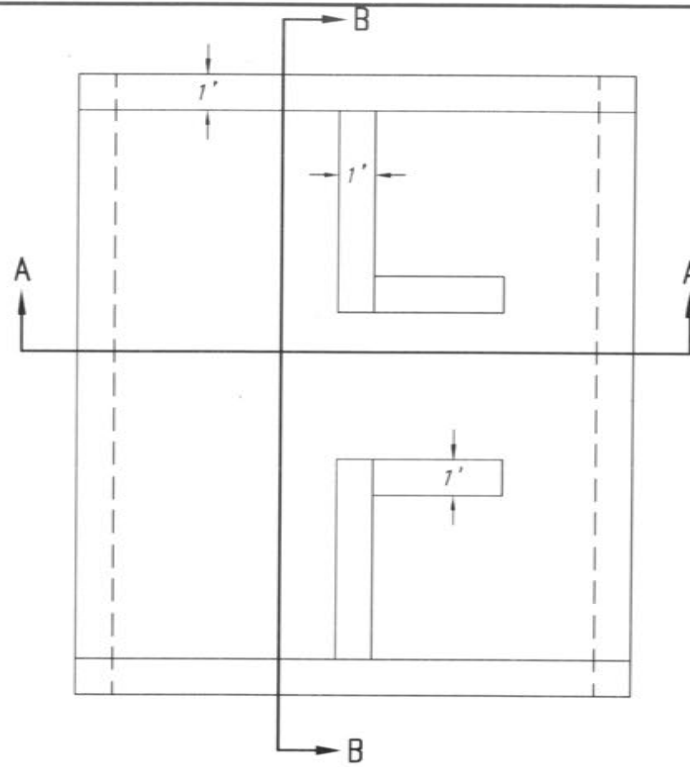
3500 PSI CONCRETE

#4 REBAR 12" O.C.
(BOTH DIRECTIONS)

3'

COMPACT SUBGRADE
TO 95% PROCTOR

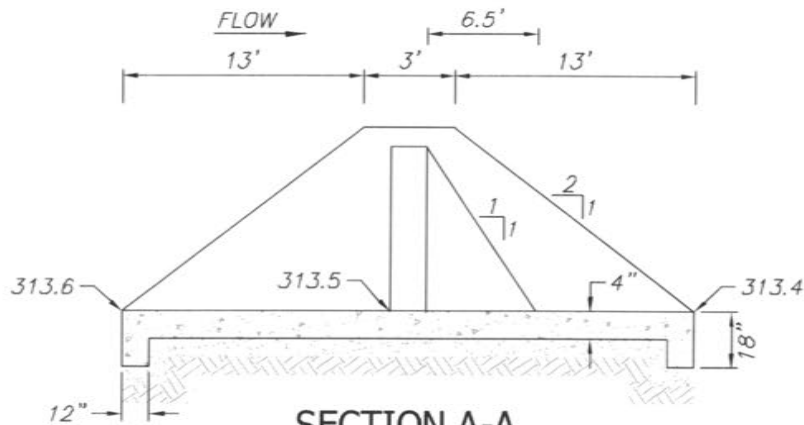
DITCH BEND DETAIL
NTS



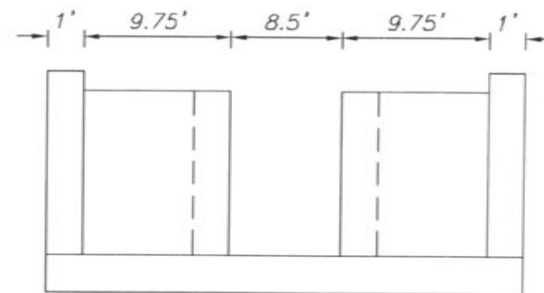
PLAN VIEW

NOTES:

- 1.) #5 REBAR SHALL BE INSTALLED 12" O.C. IN ALL CONCRETE SURFACES (BOTH DIRECTIONS).
- 2.) CONCRETE SHALL BE 3500 PSI @ 28 DAYS.
- 3.) DESIGN TO BE VERIFIED BY GEOTECHNICAL CONSULTANT PRIOR TO CONSTRUCTION.
- 4.) ELEVATIONS TO BE VERIFIED IN FIELD.



SECTION A-A



SECTION B-B

DETAIL - DISCHARGE STRUCTURE

ATC

Action ID SWL-2012-00244-1

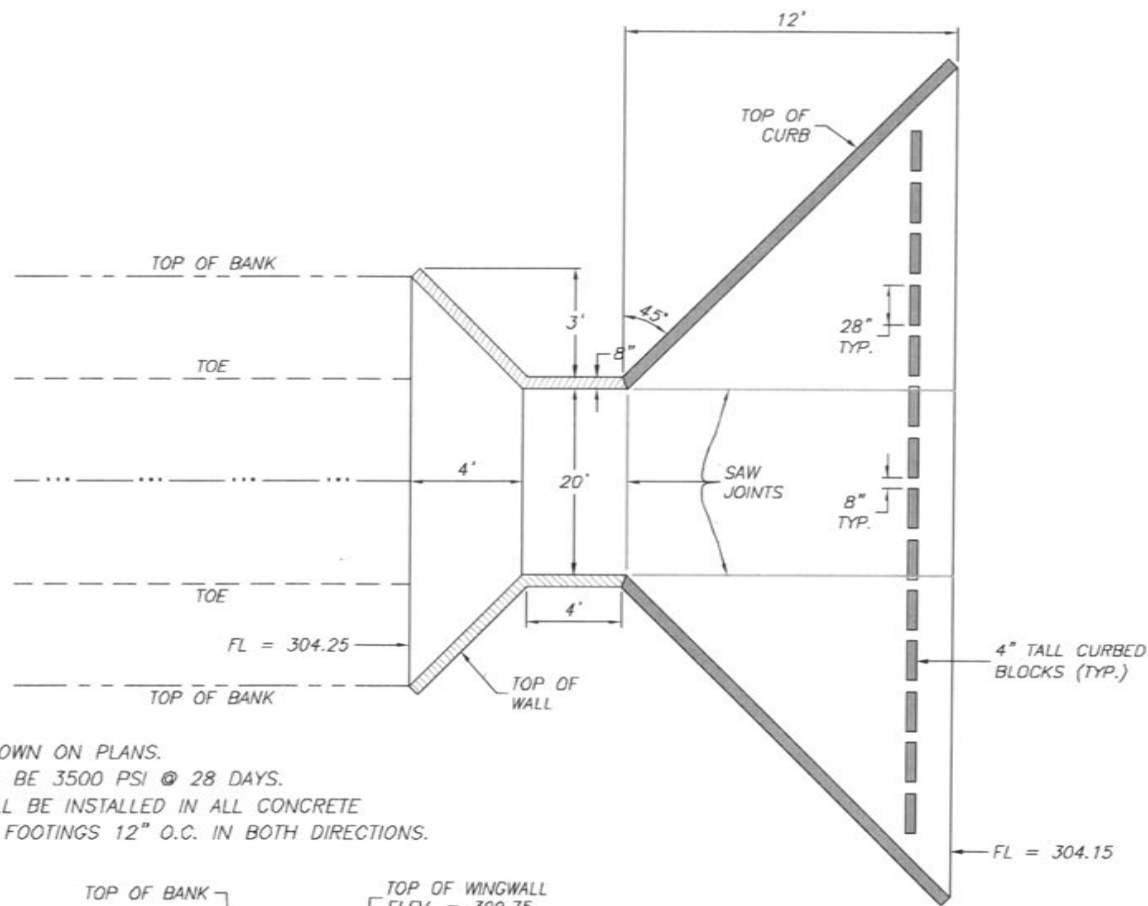
City of Shannon Hills

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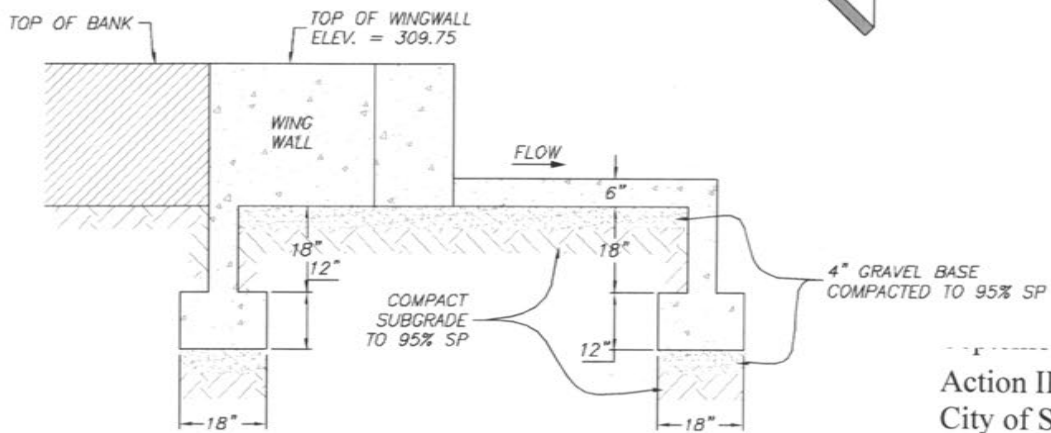
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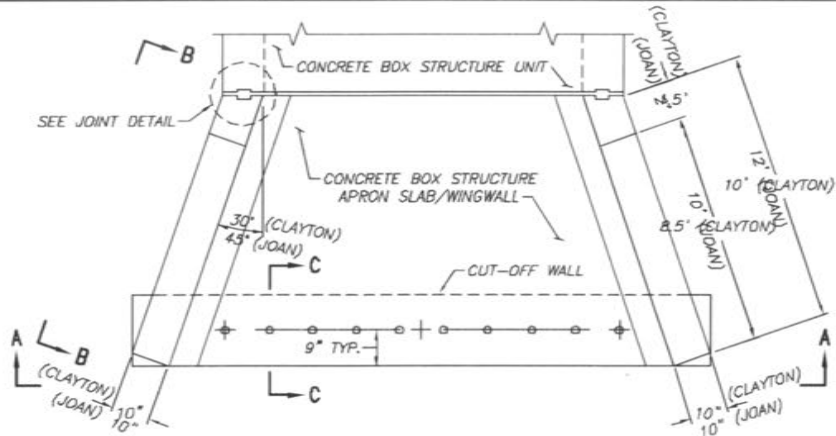
NOTES:

- 1.) RIP-RAP AS SHOWN ON PLANS.
- 2.) CONCRETE SHALL BE 3500 PSI @ 28 DAYS.
- 3.) #4 REBAR SHALL BE INSTALLED IN ALL CONCRETE SURFACES AND FOOTINGS 12" O.C. IN BOTH DIRECTIONS.



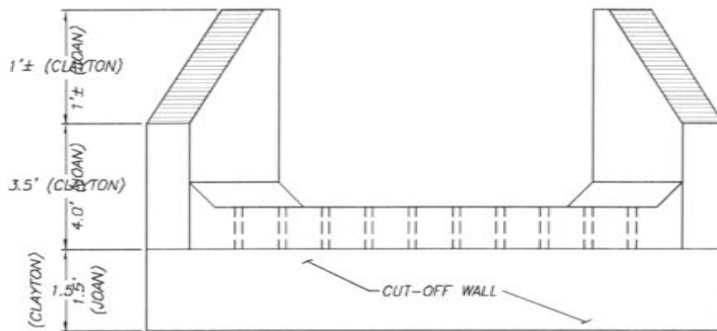
OUTFALL STRUCTURE

MTC



FLARED WINGWALL PLAN

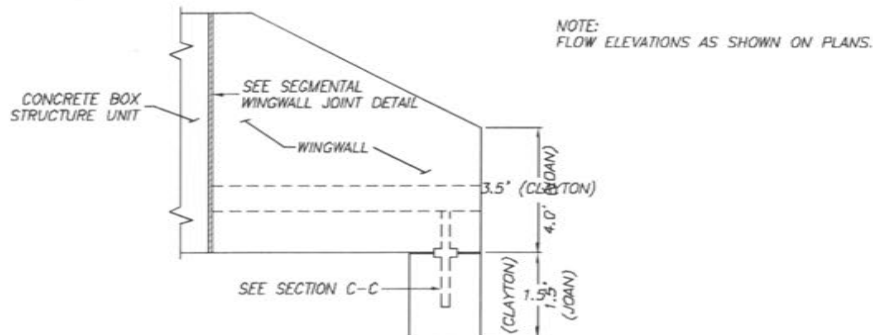
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SECTION A-A

FLARED CULVERT END SECTION

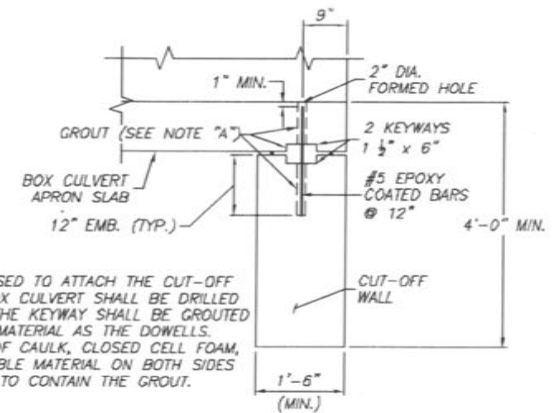
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SECTION B-B

(FLARED SECTION SHOWN)

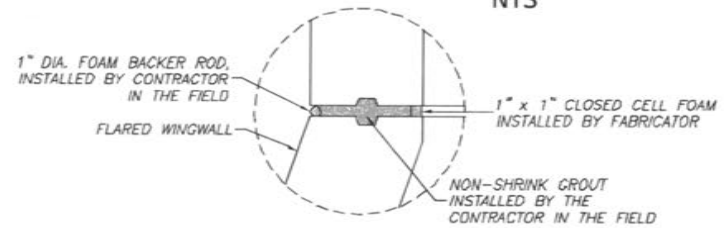
NTS



NOTE "A":
DOWEL BARS USED TO ATTACH THE CUT-OFF WALL TO THE BOX CULVERT SHALL BE DRILLED AND GROUTED. THE KEYWAY SHALL BE GROUTED WITH THE SAME MATERIAL AS THE DOWELS. PLACE A BEAD OF CAULK, CLOSED CELL FOAM, OR OTHER SUITABLE MATERIAL ON BOTH SIDES OF THE KEYWAY TO CONTAIN THE GROUT.

SECTION C-C

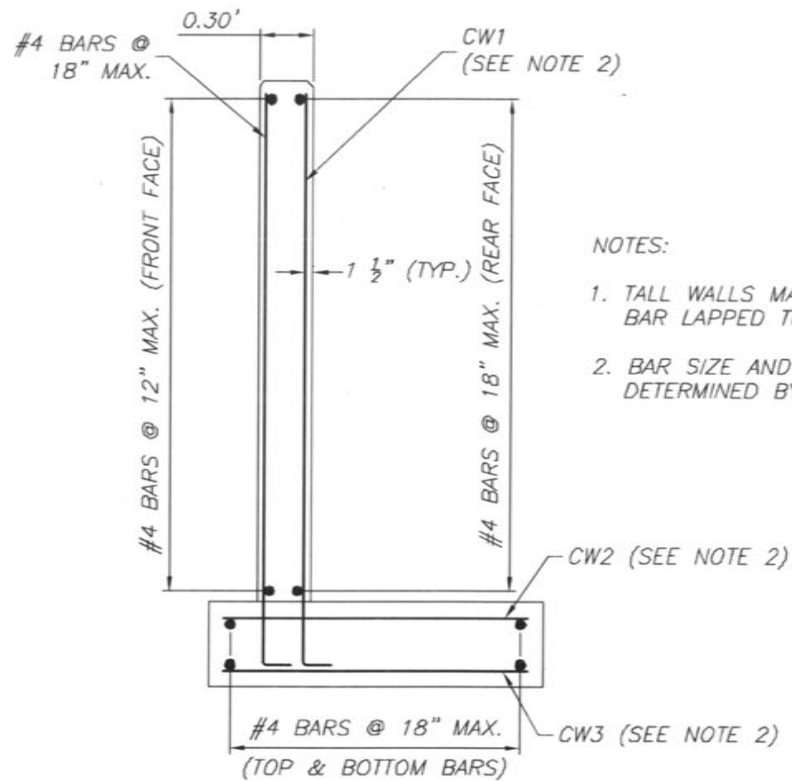
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JOINT DETAIL

NTS

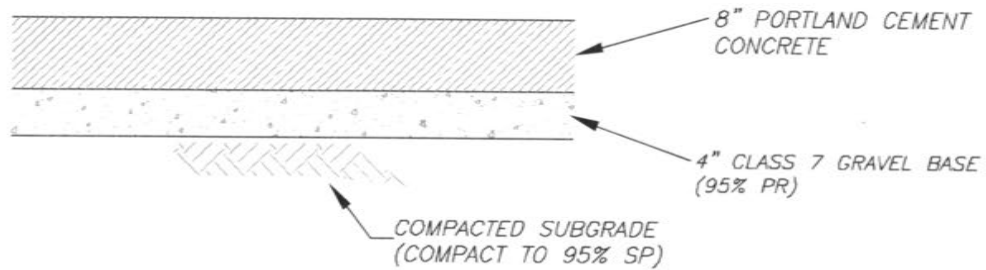
THIS DETAIL SHOWN IS AN EXAMPLE. OTHER DETAILS MAY BE PROPOSED FOR EVALUATION BY THE STATE.



NOTES:

1. TALL WALLS MAY USE A DOWEL BAR LAPPED TO A VERTICAL BAR.
2. BAR SIZE AND SPACING TO BE DETERMINED BY CONTRACTOR.

REBAR DETAIL (ALL WINGWALLS & FOOTINGS)
 NTS



PAVEMENT STRUCTURE
NTS

(MATERIALS, CONSTRUCTION METHODS & USE OF EXPANSION JOINTS TO BE VERIFIED W/ GEOTECHNICAL CONSULTANT)