



**INDIAN TRAIL IMPROVEMENT DISTRICT  
SANTA ROSA GROVES  
MAINTENANCE & OPERATIONS DEPARTMENT**

Adopted: 12/6/23 ITID BOS

**DRIVEWAY INSTALLATION, REPAIR & REMOVAL POLICY**

**I. Purpose:**

The purpose of this policy is to set forth necessary guidelines for installation, repair, and removal of driveways within Santa Rosa Groves, Unit 20 of Indian Trail Improvement District (District).

**II. Policy:**

There are eight situations involving the installation, repair, and removal of driveways within the District:

- |                                |   |
|--------------------------------|---|
| A. New Driveway Construction   | E. Homeowner Driveway/Culvert Replacement |
| B. Road and/or Swale Retrofits | F. Culvert Extensions                     |
| C. Asphalt Road Improvements   | G. Driveway Removal                       |
| D. Swale Maintenance           | H. Temporary Driveway Culverts            |

All driveways within the District must be permitted and installed according to District specifications (Attachment A) and details (Attachments B.1, B.2, and C.1). These specifications and details were designed to provide unobstructed flow of drainage water throughout Santa Rosa Groves. There are different procedures for each scenario, which are delineated below. Existing driveways as of the November 17, 2021 Water Control Plan can remain until the road is reconstructed unless they block drainage or they are in conflict with the roadway alignment. There are three additional attachments:

1. A guidance swale grading plan for Indian Trail staff to utilized in determinations of swale grades.
2. A guidance swale grading sections plan for Indian Trail staff to utilized in determinations of swale grades.
3. An example concrete mitered end section.

- A. New Driveway Construction

New driveway construction includes any work that results in the installation of driveways and/or culverts. The permittee is responsible for the excavation of the swale, clearing their roadway easement of trees and brush, installing the culvert(s), and installing Bahia sod to for the length of their property frontage on the roadway if swale elevations warrant excavation. This section includes new additional driveways, however, refer to sections "B" and "C" if applicable. The following procedures should be followed when constructing a new culvert or driveway:

1. The permittee will file a permit application, including a sketch of the driveway location and submit the appropriate fee at the District Administration Office. The sketch shall show the proposed location of the centerline of the driveway(s,) dimensioned to the nearest 0.1 foot from an adjacent property line. The sketch shall also show the proposed width of the driveway and driveway type. The current fee schedule is available at the District Administration Office. The permittee will receive specifications and swale and driveway culvert installation details (Attachments A, B, and C).
2. The permittee is responsible for calling for the location of underground utilities at 1-800-432-4770.
3. Within ten working days of the permit being issued, District staff will place survey stakes in the swale.
4. The survey stakes will be placed and marked with culvert pipe invert and swale centerline finished grade elevations. The swale centerline will be marked with elevations no more than 100 feet apart. ITID staff may also place additional swale stakes (e.g., top of swale, edge of shoulder, etc.) at additional locations within the swale as local conditions may require.
5. At this point the swale should be excavated by the permittee, if warranted.
6. If a driveway is to be millings, asphalt, or concrete, the permittee is required to call the District Administration Office for a Form Board or a base Inspection prior to installing concrete or asphalt over the culvert.
7. Upon completion of all swale and driveway site work, the permittee must call the District Administration Office to arrange for a Final Inspection.
8. The District will complete the Inspection within 3-5 working days.
9. If approved, the District will stamp the permit on the permit board with the "approved" stamp.
10. If the first inspection fails, the District will post notice of the failure on the permit board. The first inspection fee is included in the permit fee. If any additional re-inspections are required, the permittee must pay the additional re-inspection fee prior to the inspection.

## B. Road and/or Swale Retrofits

Road and/or swale Retrofit projects include re-grading of swales and/or re-grading of base rock (FKA shellrock) roads. When performing road and/or swale retrofit projects, the District may, if determined necessary, remove all existing culverts and driveways, whether permitted or not. The District may also determine it necessary to bring all existing permitted driveway culverts up to current District standards, specifications, and details. This may include complete removal and replacement of culverts. Existing permitted driveways may, if determined necessary, be removed to facilitate replacement of culverts or to match new roadway grades. All permitted driveways that require replacement, including existing paved driveways, will be replaced with 6 inches of compacted base rock in accordance with the District's specifications and details (Attachments A through C). Existing non-permitted driveways and culverts are addressed in Section "III. Unpermitted Driveways" below. The District will make all attempts to determine if existing driveways are unpermitted with enough time prior to the road and/or swale retrofit work so that homeowners can be provided adequate notice. Any additional, non-existing and/or non-permitted culverts and/or driveways desired by the owner will need to be installed at a later date and follow the new driveway section herein or as adopted by the Board unless the owner requests a permit in writing from the District to add a new driveway at the owner specified location and the owner receives a new driveway permit. The District will install the new driveway as per the new permit, providing that the materials (culvert and base rock) are paid for by the homeowner. The District will re-grade swales as required and replace any sod damaged during the project with Bahia. Other types of sod, such as St. Augustine will not be replaced in kind. Irrigation systems installed within the District's easement will be cut, capped, removed and will not be replaced. The District shall provide 30 days' notice to the homeowners located on roadways to be retrofitted prior to commencement of work.

## C. Paved/Millings Road Improvements

This section is applicable after the roadways are reconstructed pursuant to the November 17, 2021 Water Control Plan. When constructing paved/millings road improvement projects (per an approved Water Control Plan or the enhanced stabilization policy), the District may, if determined necessary, remove all existing culverts and driveways, whether permitted or not. The District will construct new driveways for paved/millings roads per the approved design plans, sections, and details. In addition, the District will replace any existing permitted driveways with an asphalt/millings driveway per the approved Plans. If the existing permitted driveways are made of concrete, or other materials such as pavers, the owner may replace the driveway with in-kind material at the owner's expense upon request and approval from ITID, as long as surface material meets permit requirements including the attachments hereto. Existing non-permitted driveways and culverts are addressed in Section "III Unpermitted Driveways" below. The District will make all attempts to determine if existing driveways are unpermitted with enough time prior to the road paving work so that homeowners can be provided adequate notice per Section "III Unpermitted Driveways". Any additional, non-existing and/or non-permitted culverts and/or driveways desired by the owner will need to be installed at a later date and follow

the new driveway section unless the homeowner requests in writing a permit from the District to add a new driveway at the owner specified location and receives a new driveway permit. The District will install the new driveway if it meets the site location details attached hereto, providing that the materials (asphalt, culverts, and base rock) are paid for by the homeowner. The District will re-grade swales as required and replace any sod damaged during the project with Bahia. Other types of sod, such as St. Augustine will not be replaced in kind. Irrigation systems installed within the District's easement will be cut, capped, removed, and will not be replaced. The District shall provide 30 days' notice to the homeowners located on roadways to be improved prior to commencement of work.

#### D. Swale Maintenance

In order to ensure proper drainage throughout the District, District staff perform regular maintenance work on swales. Swale maintenance work does not involve major changes to the grades in the swale. In doing so, District staff may also check for damage to culverts, confirm that the driveway was installed with a proper permit, and ensure that the driveway has been completed and inspected per permit requirements. District staff shall determine if culvert replacement is warranted. Culvert replacement shall be warranted if existing culvert conditions have deteriorated to the point where drainage in the swale is impeded as a result of reduction of the culvert's original capacity. If culvert replacement is required, then upon 30 days' written notice, the homeowner shall follow the procedures for New Driveway Construction to replace the culvert to meet current District standards, specifications, and details.

If a permitted, existing culvert or driveway is significantly damaged by the District during a District maintenance project; these culverts and driveways will be brought up to adopted District standards and specifications by the District. Minor damage will be repaired in kind. In addition, the District will replace any sod damaged during the project with Bahia. Other types of sod, such as St. Augustine will not be replaced in kind. Irrigation systems installed within the ITID easement will be cut, capped, and removed and will not be replaced.

#### E. Homeowner Driveway/Culvert Replacements

1. A New Driveway Permit is required for all culvert replacements and/or swale sod replacement. The current fee schedule is available at the District Administration Office.
2. Driveway replacements do not require a District permit. Driveway replacements are of like kind, in the same location, and meeting the minimum cover requirements specified in the attached details. For example, asphalt can be replaced with asphalt without a District permit being required. A change in the type of driveway (e.g. base rock to asphalt) requires a permit for a New Driveway Permit, see above.
3. Swale re-grading is not required when the work is limited to driveway replacement without culvert replacement.

4. Any roadway or swale damage from driveway repair shall be fixed and left in equal or better condition than before the work commenced.
5. Culvert replacements shall require a New Driveway Permit including full swale re-grading, see above.
6. Sod replacement in a swale requires a New Driveway Permit.
7. Minor driveway repairs such as fixing potholes do not require a District permit.

#### F. Culvert Extensions

1. Culvert extensions require a new driveway permit and shall only be allowed when the culvert material meets District standards. End treatments are mandatory.

#### G. Driveway Removal

1. An existing driveway may be removed at the owner's request. A permit is required. The current fee schedule is available at the District office.
2. The swale will be restored to match the existing conditions and elevations on either side of the work including sod.
3. Re-grading of the entire swale will not be required for voluntary driveway removal.

#### H. Temporary Driveway Culverts

Any site activities such as land clearing or home construction that require the construction of a temporary access driveway to a site shall include the installation of a temporary culvert. Temporary culverts shall be a minimum of 8 inches in diameter. Any culverts or temporary access driveways that do not meet these criteria, or otherwise create a significant drainage issue may be removed by the District. The swale shall be restored to equal or better condition after removal of the Temporary Driveway. Temporary Driveway permits are valid for 180 days unless administratively extended in writing at the request of the permittee.

### **III. Unpermitted Driveways:**

If it is discovered that a culvert or driveway, which otherwise is not to be removed by the District as described above, has been installed without the proper permit, or has not been completed to District standards, the following steps will be taken:

- A. The lot owner will be given a Violation Notice allowing 30 days to comply with current District standards, along with a copy of this policy.
- B. The lot owner will either remove the driveway or apply for a new driveway permit and

follow the permit requirements, see above.

- C. The District will inspect the property after 30 days to ensure that the driveway was removed unless a new driveway permit application has been received.
- D. If the driveway is still in place after 30 days and a new permit application has not been received, the homeowner will be given a second notice informing them that their driveway must be removed within the next 10 days.
- E. If the driveway is still in place and a new permit application has not been received, the driveway may be removed by the District.

#### **IV. Existing Permitted Driveways:**

All driveways that existed as of the approval of the Water Control Plan on 11/7/21 do not require modifications unless they interfere with drainage or the roadway alignment.

#### **V. Canal Crossings:**

Canal crossings between adjacent parcels are allowed with the following requirements:

- A. The parcels must be owned by the same entity.
- B. The minimum pipe size is a 36" HDPE, a length of 60', and an invert of 14.0' NGVD.
- C. The pipe size for the west canal that runs north-south shall be the larger of the two pipes in the Water Control Plan (downstream).
- D. The side slopes of the crossing shall be 3H:1V.
- E. The crossing elevation shall be 20.0' NGVD and have a top width of 18.0'.
- F. The fill material shall be base rock compacted to 96% AASHTO T-180.
- G. The property owner is responsible for all costs and shall enter into maintenance, hold harmless, and removal agreements for canal crossings.

#### **VI. Miscellaneous:**

- A. Nothing other than a mailbox is allowed in a District easement without a permit.
- B. No ornamental structures above grade are allowed in a District easement.
- C. Specialized pavements such as paver blocks and stamped concrete are subject to removal per the above policy and will not be replaced under any circumstances by the District.
- D. The District is not responsible for damages to a homeowner's facilities within a District easement unless addressed above.

E. Obstructions in District easements are not allowed, see “Obstructions in ITID Right-of-Way” Policy and Section 298.66 of the Florida Statutes. All obstructions must be removed by the landowner within 30 days of notification by the District for road and/or swale retrofits, a new millings road, and for a new paved road or the District may remove the obstructions at the landowner’s expense. However, the District Executive Director may waive removal of an existing obstruction for a new driveway, swale maintenance, homeowner driveway maintenance, removal of a driveway, or a temporary driveway if the District Engineer opines in writing the existing obstruction is not currently causing interference with the roadway and/or drainage functions within the easement. The District reserves the right to require removal of an obstruction should it be determined by the District Engineer as interfering with the function of the easement.



Adopted: 12/6/23 ITID BOS

## **SANTA ROSA GROVES ATTACHMENT A ITID DRIVEWAY INSTALLATION/CULVERT SPECIFICATIONS**

1. CULVERT MATERIAL SHALL BE ONE OF THE FOLLOWING:
  - HIGH DENSITY POLYETHYLENE (HDPE) SMOOTH WALL INTERIOR CORRUGATED PIPE, RATED FOR H-20 LOADING BY ADS.
  - A-2000 PVC PIPE BY CONTECH.
  - POLYPROPYLENE SMOOTH WALL INTERIOR CORRUGATED PIPE, RATED FOR H-20 LOADING BY ADS.
  - OTHER CULVERT MATERIALS, SUCH AS RCP MAY BE ALLOWED UPON REVIEW AND APPROVAL BY THE DISTRICT.
2. CULVERT DIAMETER SHALL BE 15" OR AS DETERMINED BY THE DISTRICT.
3. THESE SPECIFICATIONS ARE APPLICABLE FOR RESIDENTIAL DRIVEWAY AUTO TRAFFIC ONLY. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE DESIGN AND SELECTION OF MATERIALS WHICH MAY BE REQUIRED FOR HEAVIER TRAFFIC LOADS.
4. CULVERTS SHALL HAVE FLARED END SECTIONS BY THE MANUFACTURERS OF THE ABOVE-REFERENCED CULVERTS. CONCRETE MITERED END SECTIONS MAY BE ALLOWED UPON REVIEW AND APPROVAL BY THE DISTRICT, SEE ATTACHED DETAIL.
5. UNDER NO CIRCUMSTANCES SHALL VERTICAL WALLS, ENDPOSTS, HEADWALLS, DECORATIVE OR OTHERWISE, BE INSTALLED WITHIN THE DISTRICT'S EASEMENTS.
6. CULVERT MAY BE OMITTED AT THE DIRECTION OF THE DISTRICT. IN THIS CASE THE DRIVEWAY SHALL MATCH SWALE GRADES AS SPECIFIED BY THE DISTRICT.
7. SEE DRIVEWAY CONNECTION/CULVERT DETAILS (ATTACHMENTS B.1 THROUGH B.2) FOR DRIVEWAY MATERIALS AND BACKFILL REQUIREMENTS.
8. ANY DAMAGE TO EXISTING SWALES, ROADWAYS, BIKE PATHS, ETC. DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR/HOMEOWNER AND COULD POSTPONE DRIVEWAY CONSTRUCTION APPROVAL.
9. SWALES SHALL BE GRADED ALONG THE ENTIRE FRONTAGE OF THE PROPERTY, AS REQUIRED, TO THE ELEVATIONS AS DETERMINED AND SET VIA SURVEY STAKES BY THE DISTRICT. SOD ENTIRE SWALE ALONG THE FRONTAGE OF THE PROPERTY FROM EDGE OF ROADWAY TO THE RIGHT-OF-WAY/EASEMENT LINE. SOD SHALL BE BAHIA. FLORATAM SHALL NOT BE PERMITTED. NO IRRIGATION SYSTEM COMPONENTS SHALL BE ALLOWED IN THE RIGHT-OF-WAY/EASEMENT.
10. A MAXIMUM OF 3 DRIVEWAYS (WITH A TOTAL MAXIMUM CULVERT LENGTH OF 144 FEET AND A SINGLE MAXIMUM CULVERT LENGTH OF 60 FEET) ARE ALLOWED FOR A PROPERTY WITH ROADWAY FRONTAGE ON ONE SIDE OF THE PROPERTY AND 5 DRIVEWAYS (WITH A TOTAL MAXIMUM CULVERT LENGTH OF 228 FEET AND A SINGLE MAXIMUM CULVERT LENGTH OF 60 FEET) WITH ROADWAY FRONTAGE ON TWO OR MORE SIDES OF THE





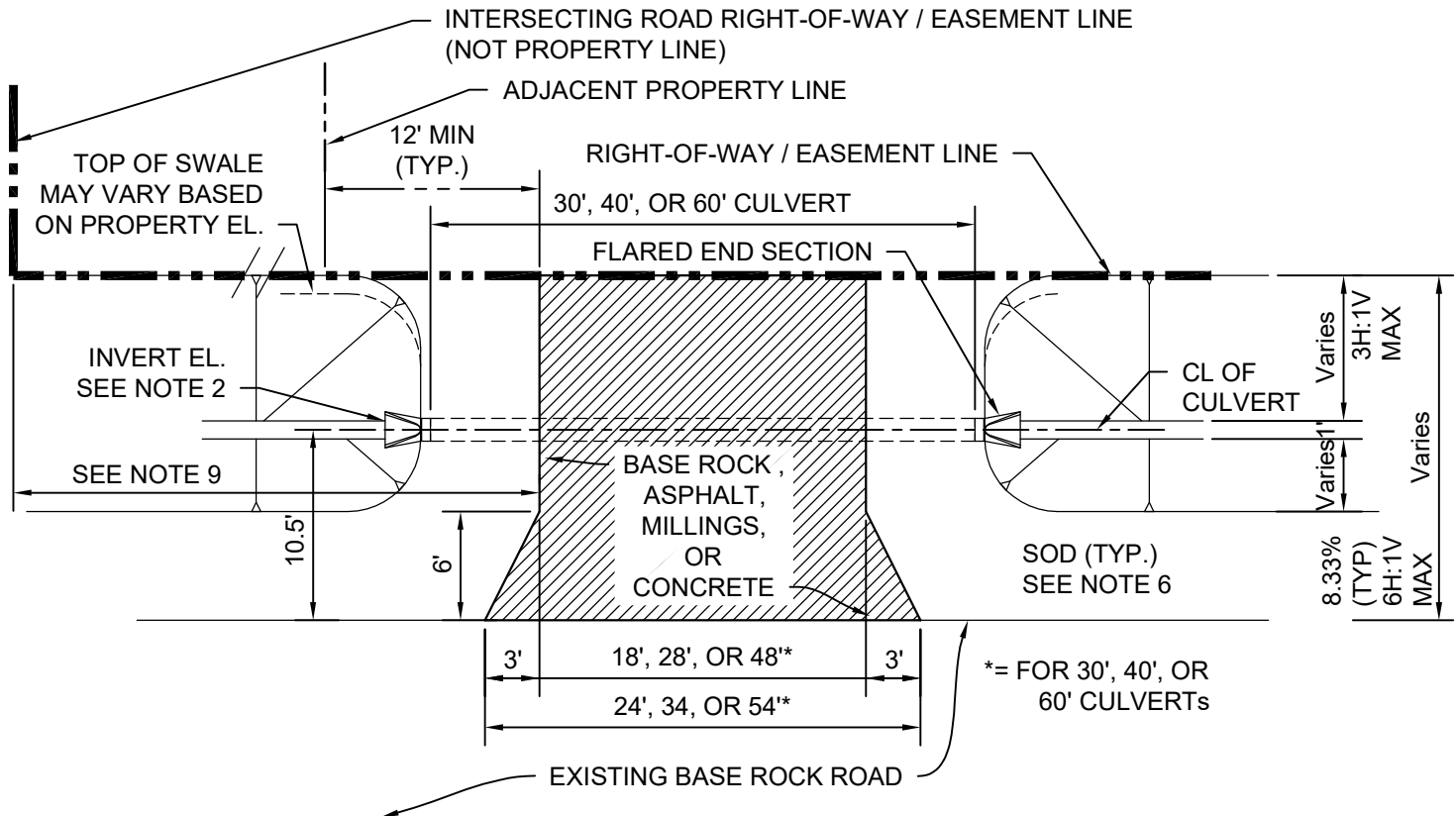
Adopted: 12/6/23 ITID BOS

PROPERTY. CANAL MAINTENANCE ROADS ARE NOT ALLOWED DRIVEWAYS AND ARE NOT CONSIDERED FRONTAGE. EXISTING PERMITTED DRIVEWAYS ARE "GRANDFATHERED IN" ANY NEW DRIVEWAY(S) MUST MEET THESE CRITERIA.

11. BASE ROCK MATERIAL SHALL BE ONE OF THE FOLLOWING:
- FDOT SHELLROCK PER TO SECTION 911 OF THE LATEST FDOT STANDARD SPECIFICATIONS.
  - FDOT BASE MATERIAL PER SECTION 200 OF THE LATEST FDOT STANDARD SPECIFICATIONS.
  - FDOT BASE ROCK (CODE 11).
  - 1" MINUS BASE ROCK AS APPROVED BY THE DISTRICT ENGINEER.

THE OWNER SHALL SUBMIT PROOF OF PURCHASE FROM AN APPROVED SOURCE WHEN THE BASE MATERIAL IS SUPPLIED BY THE OWNER.

# SRG ATTACHMENT B.1



## INDIAN TRAIL IMPROVEMENT DISTRICT

### 60' EASEMENT DRIVEWAY CONNECTION/CULVERT DETAIL (BASE ROCK ROAD)

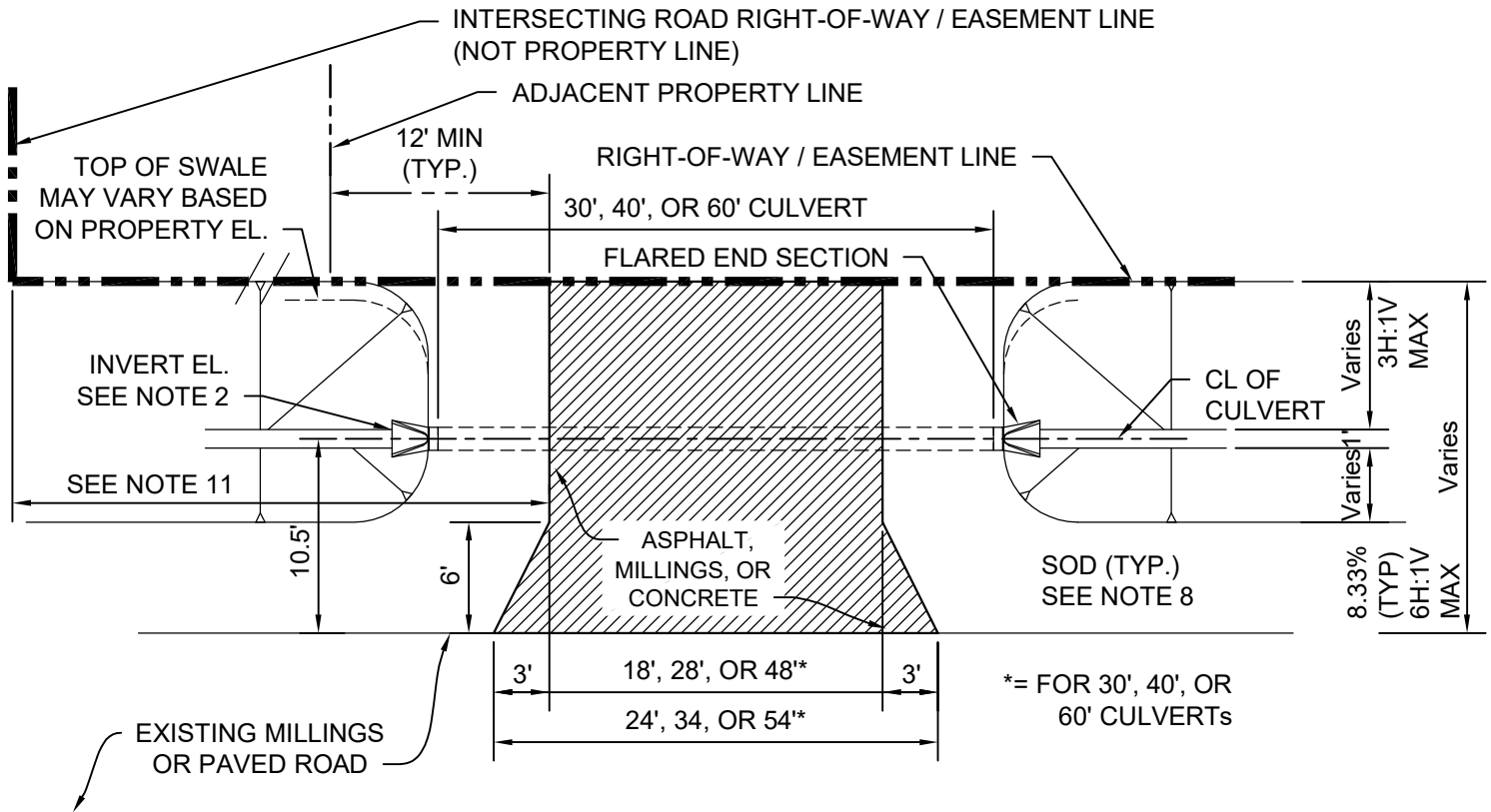
N.T.S.

#### NOTES:

- CULVERT MATERIAL, DIAMETER AND FLARED END SECTIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN ATTACHMENT A.
- ALL PIPE LOCATIONS AND ELEVATIONS SHALL BE SET BY THE DISTRICT.
- BASE ROCK MATERIAL SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN ATTACHMENT A
- BASE ROCK SHALL BE MIN. 6" IN THICKNESS AND COMPACTED TO MIN. 98% MAX. DRY DENSITY PER AASHTO T-180. THE MINIMUM COVER OF BASE ROCK OVER THE CULVERT SHALL BE 6".
- ALL BACKFILL AND BASE SHALL BE COMPACTED TO THE ABOVE SPECIFICATIONS.
- DRIVEWAY ELEVATION SHALL MATCH ROADWAY ELEVATION AT CONNECTION POINT.
- SWALES SHALL BE GRADED AND SODDED WITH BAHIA ALONG THE ENTIRE FRONTAGE OF THE PROPERTY IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN ATTACHMENT A.
- UNLESS NEEDED OTHERWISE, ALL ROADSIDE SWALE SLOPES SHALL BE 4H:1V OR FLATTER.
- DRIVEWAY SHALL BE CONSTRUCTED FROM EDGE OF EXISTING ROADWAY TO THE RIGHT-OF-WAY/EASEMENT LINE ON BOTH SIDEWALK AND NON-SIDEWALK SIDES.
- THE EDGE OF DRIVEWAY SHALL BE SET BACK A MINIMUM FROM THE RIGHTS-OF-WAY/EASEMENT LINES FROM ADJACENT INTERSECTING ROADWAYS AS FOLLOWS:
  - MIN. 30' TO DISTRICT NEIGHBORHOOD ROADS
  - MIN. 50' TO DISTRICT MAJOR OR PALM BEACH COUNTY COLLECTOR ROADS
  - MIN. 75' TO PALM BEACH COUNTY ARTERIAL ROADS
- THE 6' TAPER ILLUSTRATED ABOVE CAN BE MODIFIED TO A RADIUS OF NO LESS THAN 10' FOR RESIDENTIAL AND NO LESS THAN 30' FOR NON RESIDENTIAL USES.

# SRG ATTACHMENT B.2

ADOPTED : 12/6/23 ITID BOS



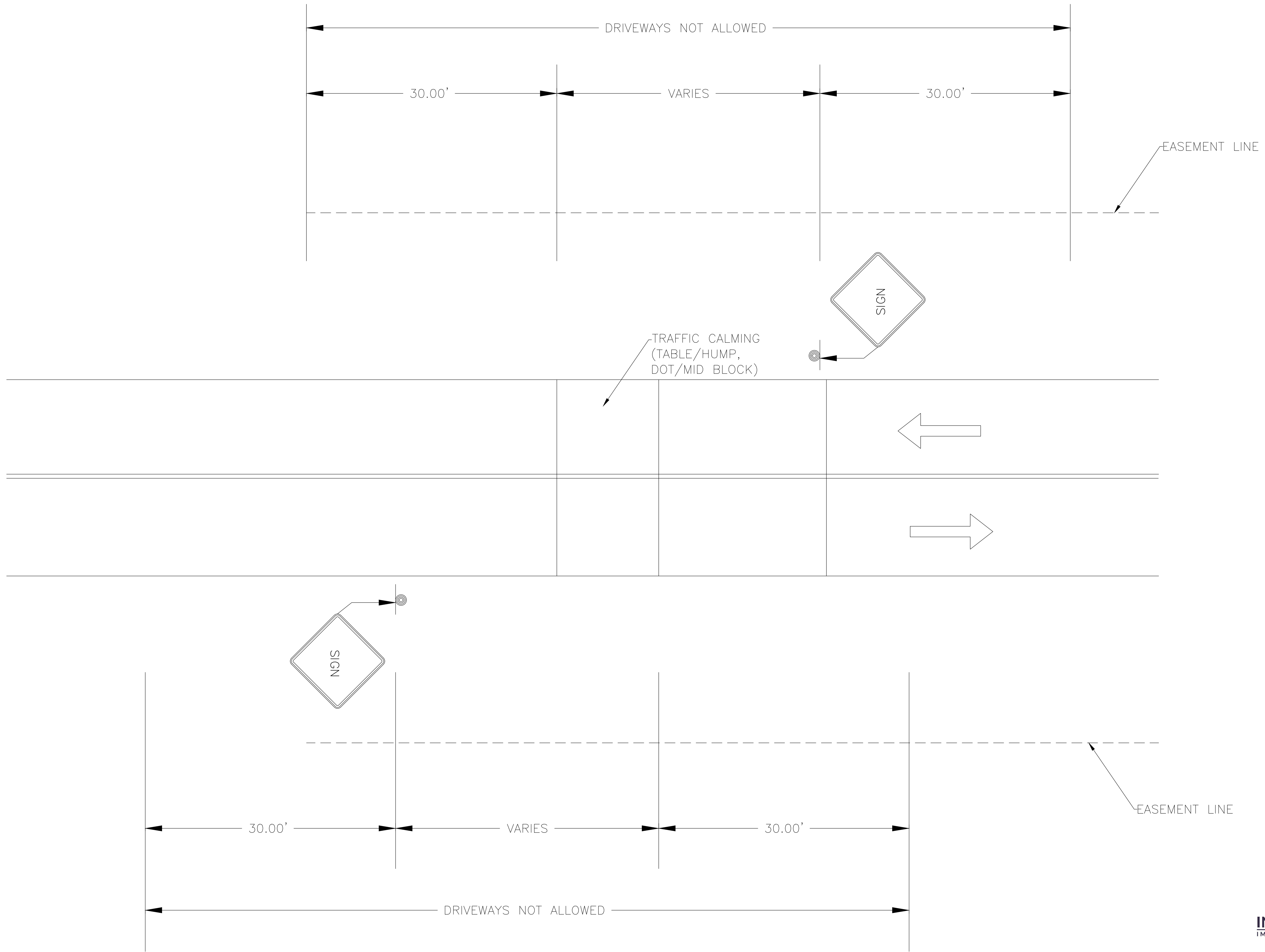
## INDIAN TRAIL IMPROVEMENT DISTRICT

### 60' EASEMENT DRIVEWAY CONNECTION/CULVERT DETAIL (PAVED/MILLINGS ROAD)

N.T.S.

#### NOTES:

1. CULVERT MATERIAL, DIAMETER AND FLARED END SECTIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN ATTACHMENT A.
2. BASE ROCK MATERIAL SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN ATTACHMENT A
3. ALL PIPE LOCATIONS AND ELEVATIONS SHALL BE SET BY THE DISTRICT.
4. ALL BACKFILL AND BASE SHALL BE COMPACTED TO THE ABOVE SPECIFICATIONS.
5. ASPHALT SHALL BE 1-1/2" TYPE S-3, OVER A MIN. 8" BASE ROCK BASE, COMPACTED TO MIN. 98% MAX. DRY DENSITY PER AASHTO T-180. EXTEND BASE MIN. 3" BEYOND EDGE OF ASPHALT. CONCRETE SHALL BE MIN. 6" THICK, 4,000 PSI, OVER MIN 4" COMPACTED SAND BASE. THE MINIMUM COVER OVER THE CULVERT SHALL BE 8". MILLINGS SHALL BE MIN 5" WITH APPROXIMATELY 6% MOISTURE CONTENT COMPACTED TO 95% FDOT SPEC 283, WITH A BINDER (E.G. DAWN AT 1% CONCENTRATION), SEALED PER FDOT SPEC 283, & ON 12" COMPACTED SUBGRADE TO 98% AASHTO T-180.
6. REFER TO PALM BEACH COUNTY DESIGN STANDARDS MANUAL SECTION 300 FOR THICKENED EDGE END DETAIL AND SAW CUT REQUIREMENTS OF CONCRETE DRIVEWAYS.
7. PRIOR TO INSTALLATION OF ASPHALT/MILLINGS/CONCRETE, CONTACT THE DISTRICT TO SCHEDULE AN INSPECTION OF LAYOUT AND FORMWORK.
8. DRIVEWAY ELEVATION SHALL MATCH ROADWAY ELEVATION AT CONNECTION POINT.
9. SWALES SHALL BE GRADED AND SODDED WITH BAHIA ALONG THE ENTIRE FRONTAGE OF THE PROPERTY IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN ATTACHMENT A.
10. UNLESS NEEDED OTHERWISE, ALL ROADSIDE SWALE SLOPES SHALL BE 4H:1V OR FLATTER.
11. ASPHALT/MILLINGS/CONCRETE DRIVEWAY SHALL BE CONSTRUCTED FROM EDGE OF EXISTING ROADWAY TO THE RIGHT-OF-WAY/EASEMENT LINE ON BOTH SIDEWALK AND NON-SIDEWALK SIDES.
12. THE EDGE OF DRIVEWAY SHALL BE SET BACK A MINIMUM FROM THE RIGHTS-OF-WAY/EASEMENT LINES FROM ADJACENT INTERSECTING ROADWAYS AS FOLLOWS:
  - MIN. 30' TO DISTRICT NEIGHBORHOOD ROADS
  - MIN. 50' TO DISTRICT MAJOR OR PALM BEACH COUNTY COLLECTOR ROADS
  - MIN. 75' TO PALM BEACH COUNTY ARTERIAL ROADS
13. BASE ROCK DRIVEWAY NOT PERMITTED ON ASPHALT OR MILLINGS ROADS.
14. THE 6' TAPER ILLUSTRATED ABOVE CAN BE MODIFIED TO A RADIUS OF NO LESS THAN 10' FOR RESIDENTIAL AND NO LESS THAN 30' FOR NON RESIDENTIAL USES.



**SJE**

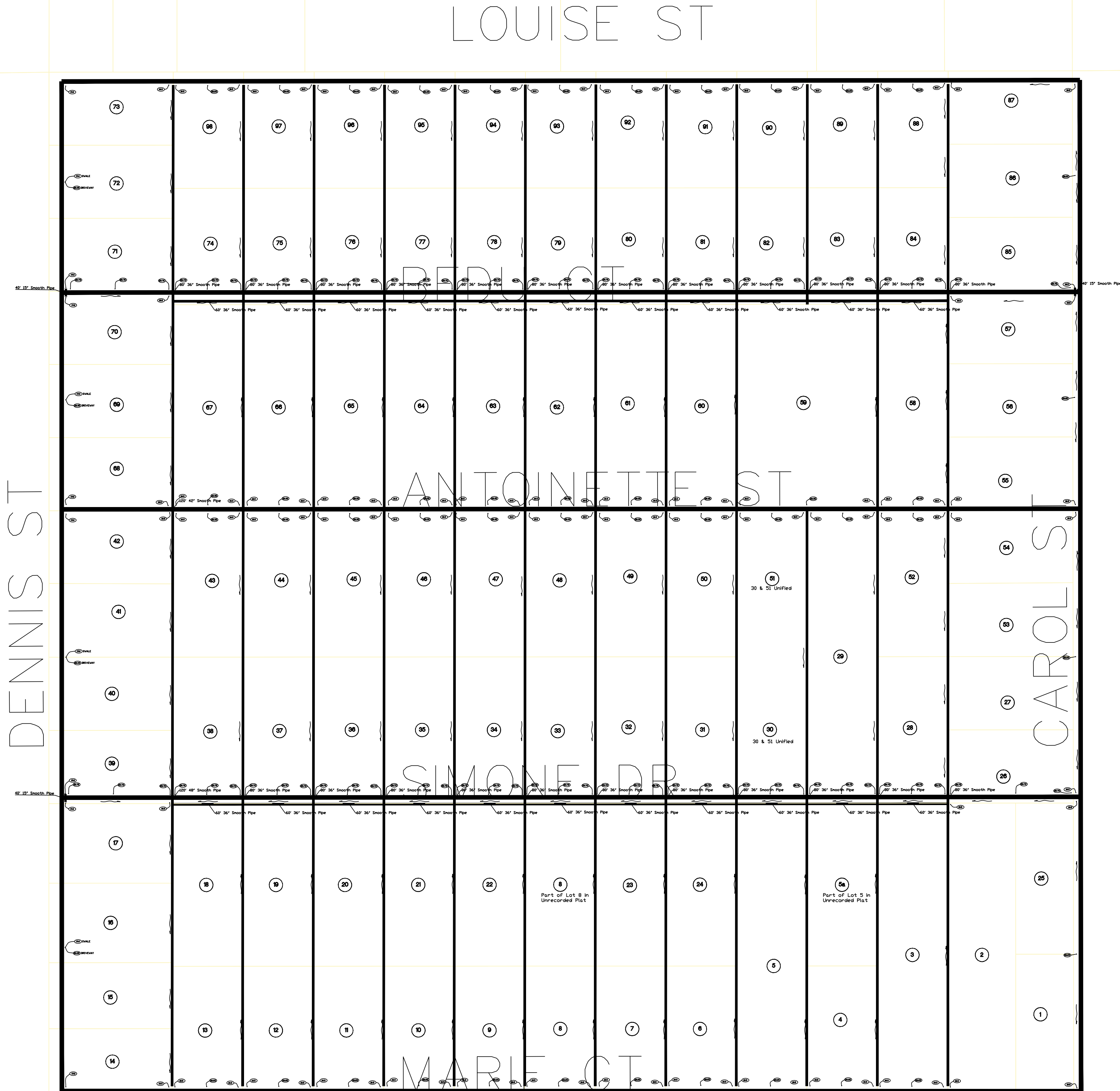
**STORMWATER J ENGINEERING, INC.**

Civil, Hydrologic & Hydraulic Engineers  
 1855 Indian Road, Suite 202, West Palm Beach, FL 33409  
 Ph (561)242-0028 • Fax (561)242-0109  
 stormj@dm.com

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**Driveways Not Allowed ATTACHMENT C.1**

SHEET NO. <b>1</b>	DATE	12/9/23	Logo
	DRAWN	JGF	
JOB NO. <b>91084.025</b>	CHECKED	JAY G. FOY	



LOUISE ST

LOUISE

DENNIS ST

ANTOINETTE ST

SIMONE DR

CAROL ST

Flow Direction

① Unrecorded Plat Lot Number

Swale Grade - NGVD

NO.	DATE	REVISIONS	REMARKS
1			

**STORMWATER ENGINEERING, INC.**  
**SJE**  
 Civil, Hydrologic & Hydraulic Engineers  
 10000 Wilshire Blvd, Suite 1000, Beverly Hills, CA 90210  
 Ph: (310) 242-0028 • Fax: (310) 242-0109 • stormwater@sjeng.com

**INDIAN TRAIL IMPROVEMENT DISTRICT**  
**Santa Rosa Groves - Guidance**  
 Swale Grading Plan - NGVD

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DATE	8/15/23
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PROJECT MANAGER	JGF
JOB NO.	91084.001

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NO.	DATE	REVISIONS	REMARKS

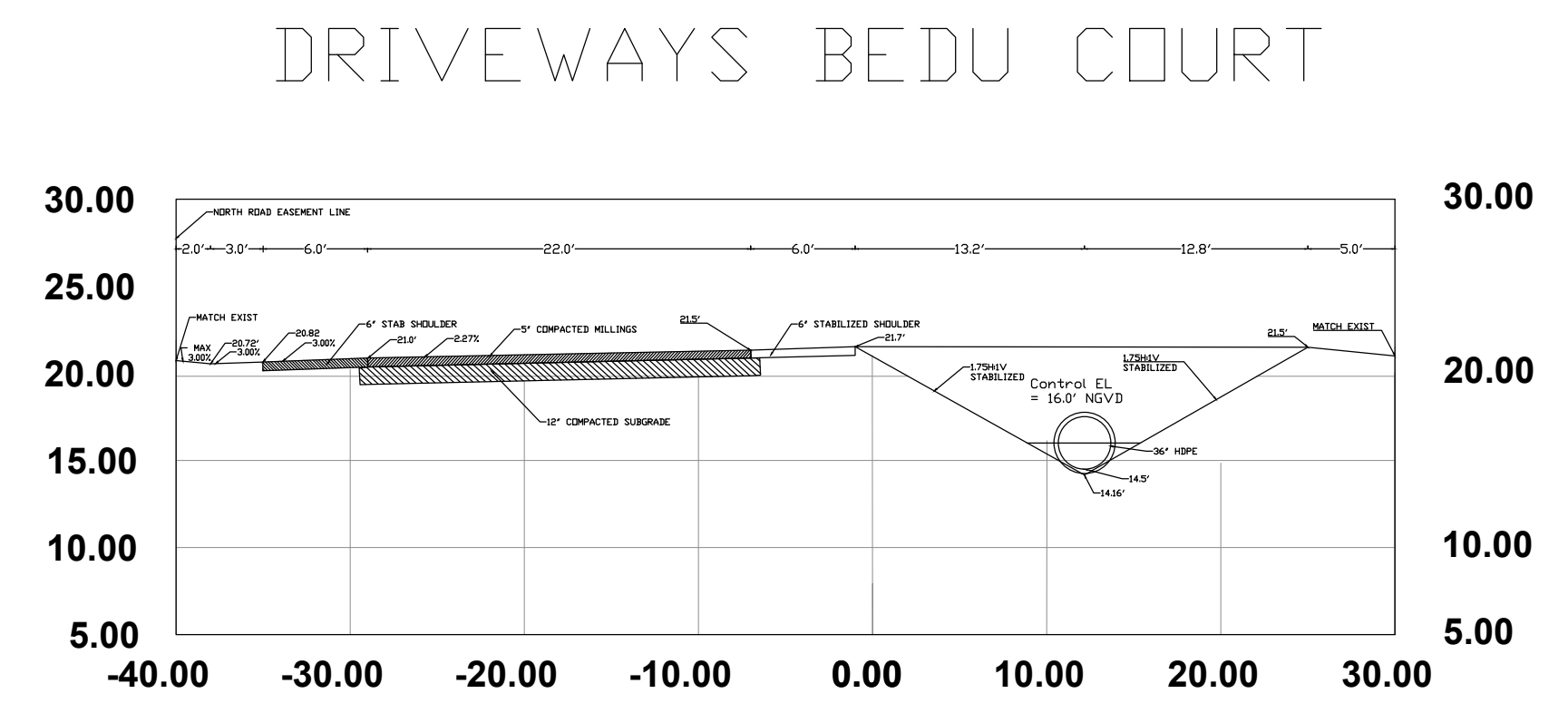
**STORMWATER ENGINEERING, INC.**  
**SJE**  
 Civil, Hydrologic & Hydraulic Engineers  
 1825 Indian Rock, Suite 202, West Palm Beach, FL 33409  
 Ph: (561) 942-0225 • Fax: (561) 942-0119 • storminfo.com

**INDIAN TRAIL IMPROVEMENT DISTRICT**  
**Santa Rosa Groves - Guidance**  
**SWALE GRADING SECTIONS - NGVD**

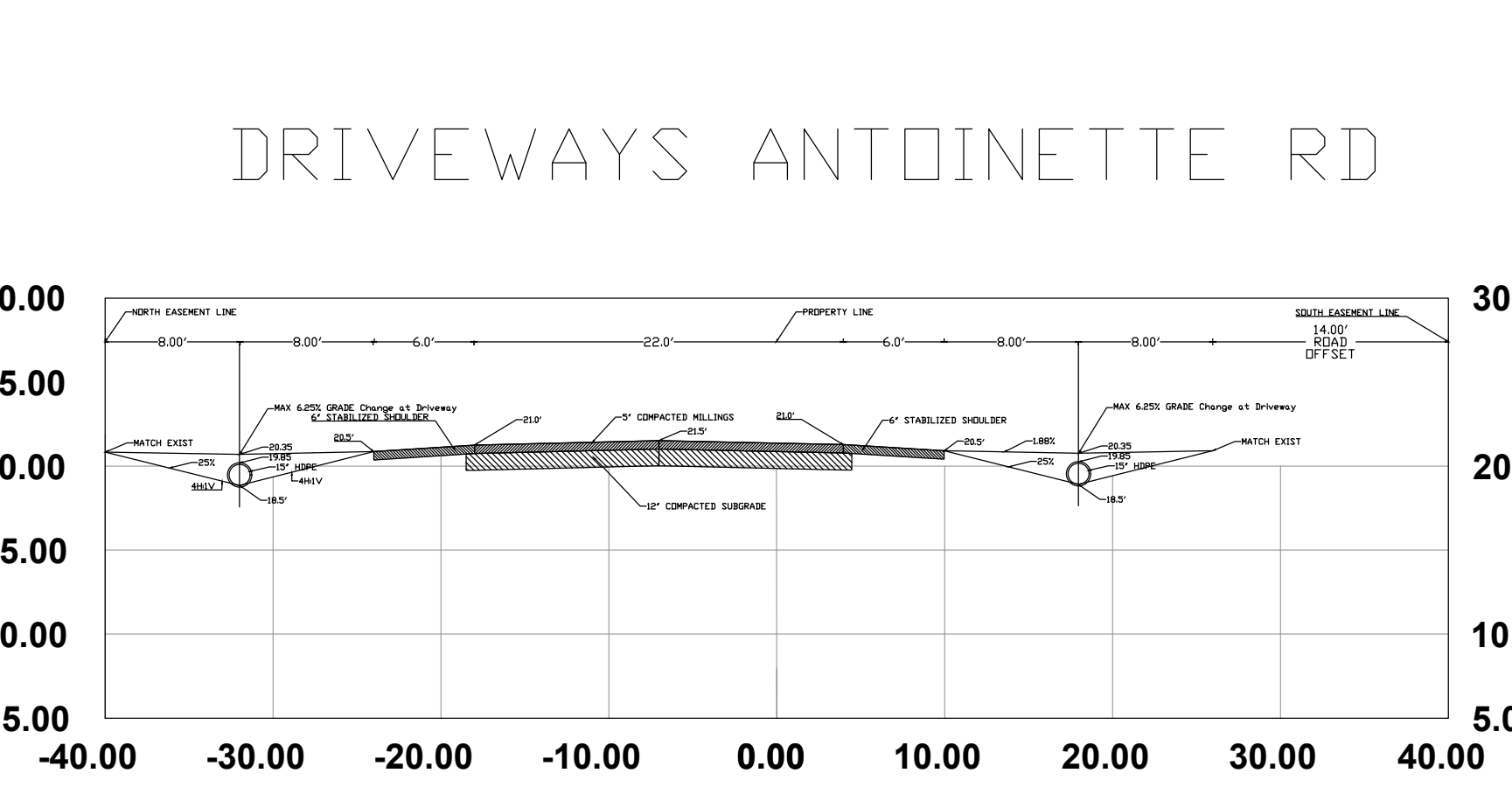
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PROJECT MANAGER	JGF

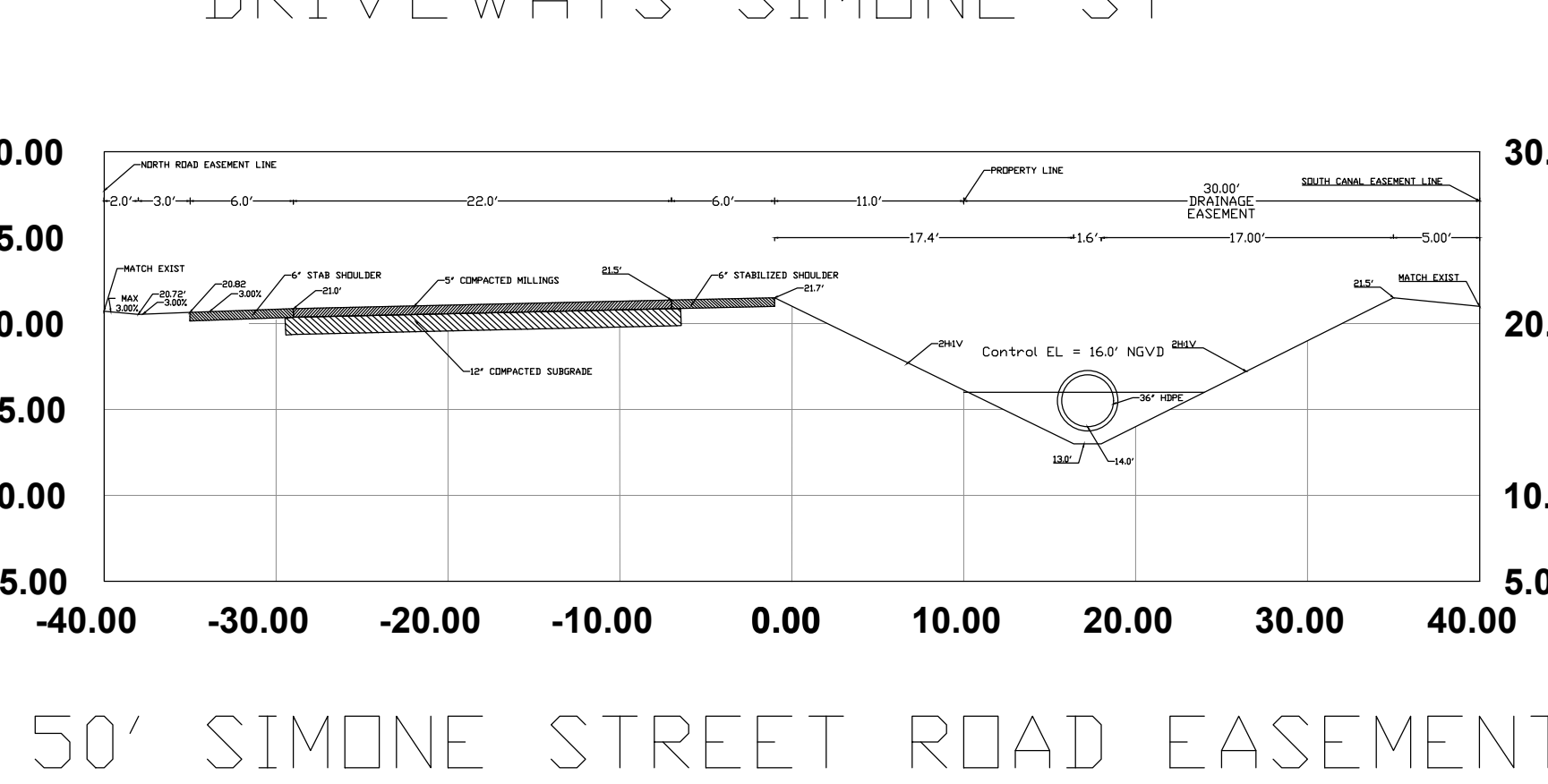
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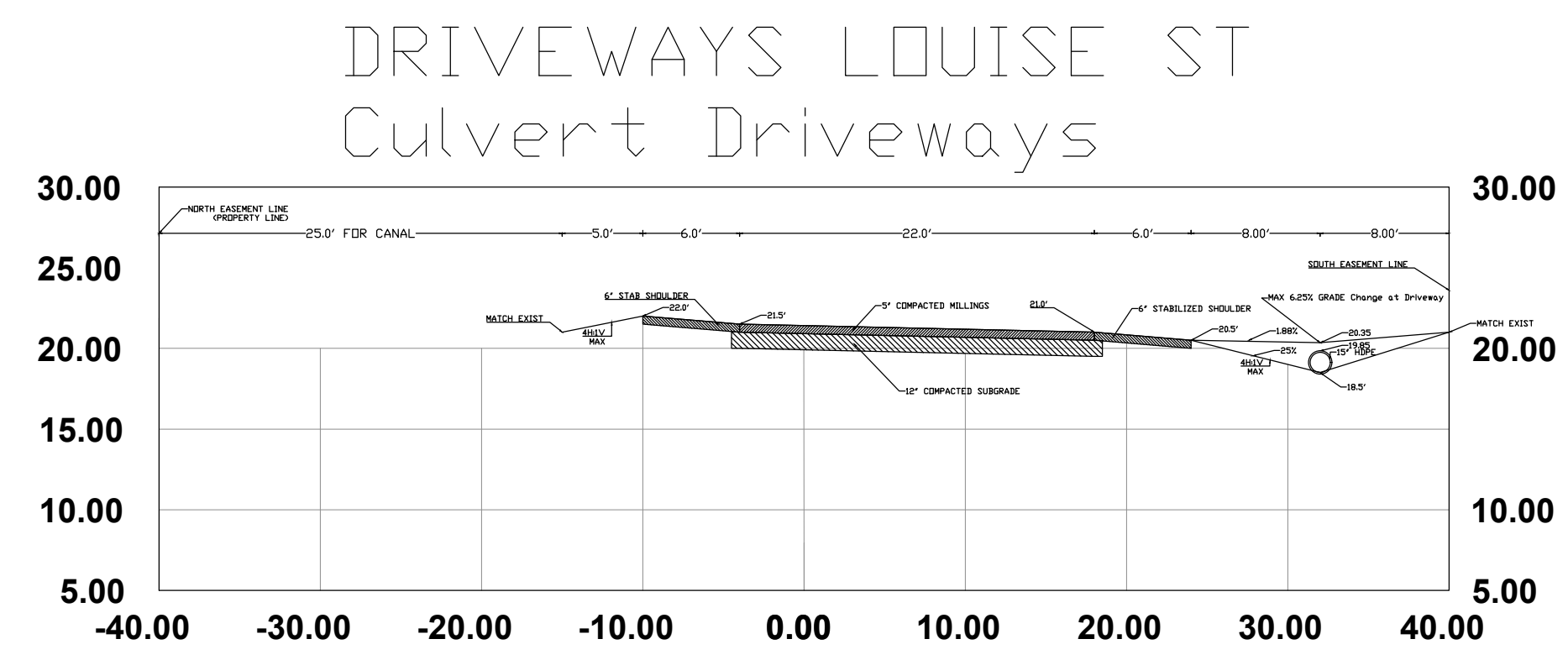
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 Swale High Point Driveway



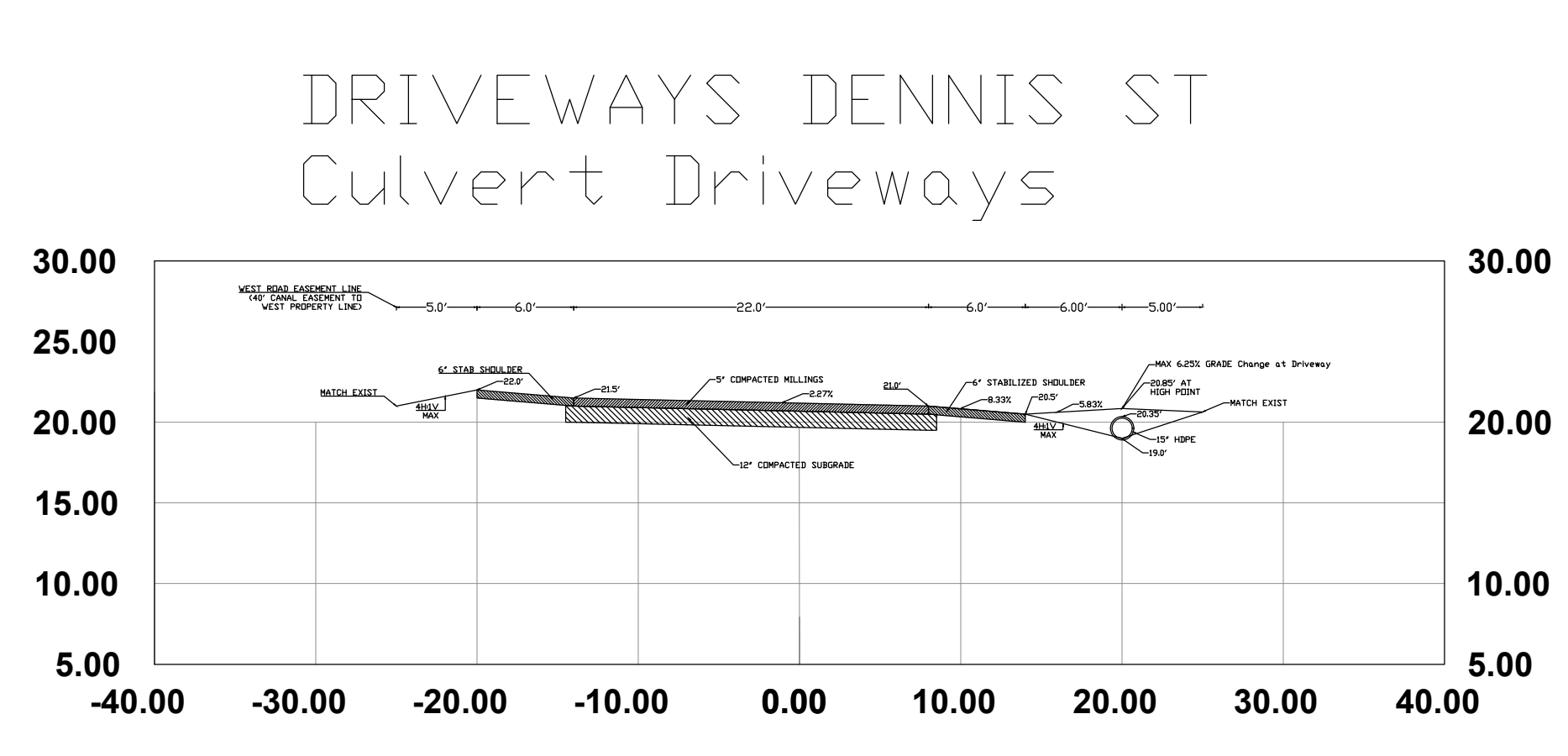
DRIVEWAYS ANTOINETTE RD  
 Swale High Point Driveway



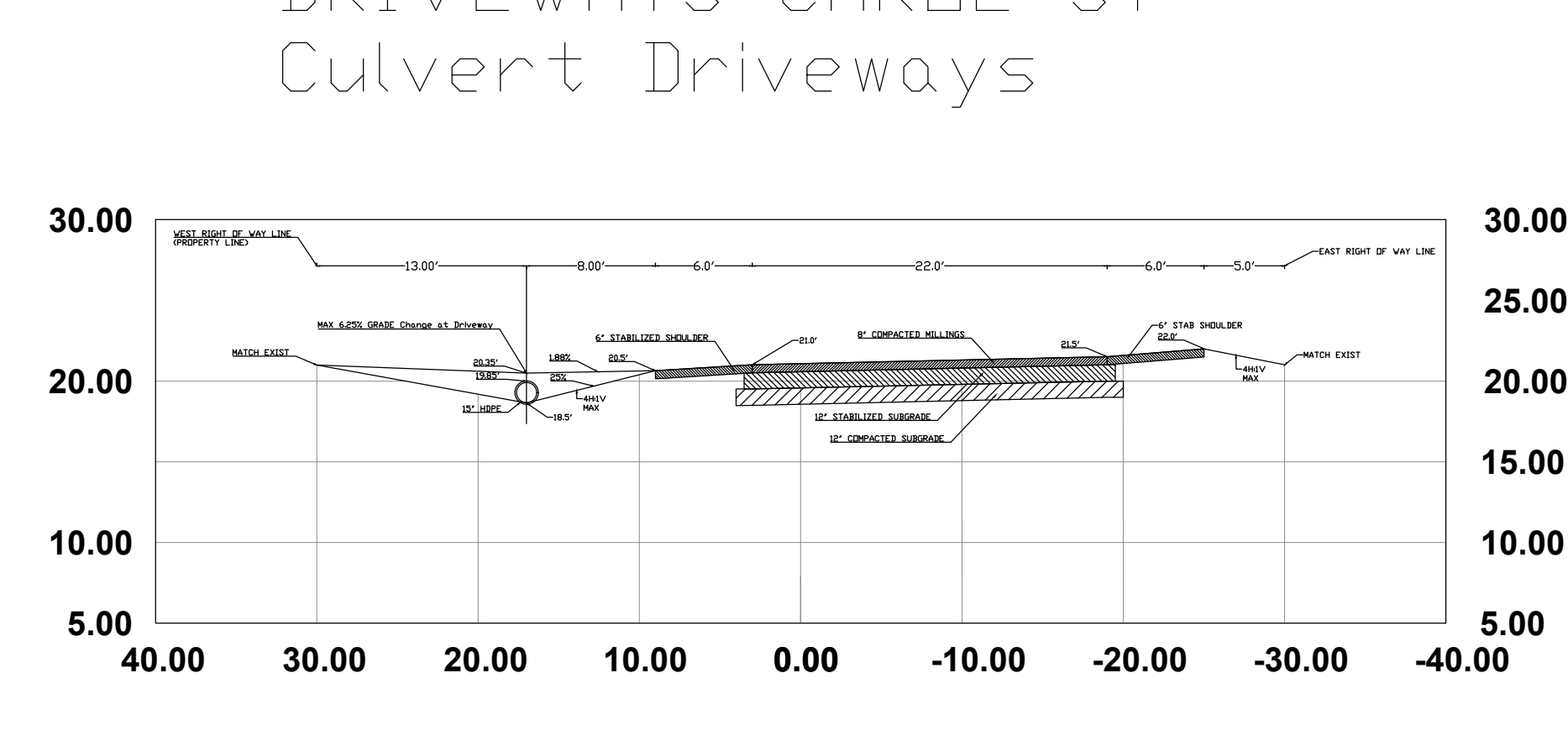
DRIVEWAYS SIMONE ST  
 Swale High Point Driveway



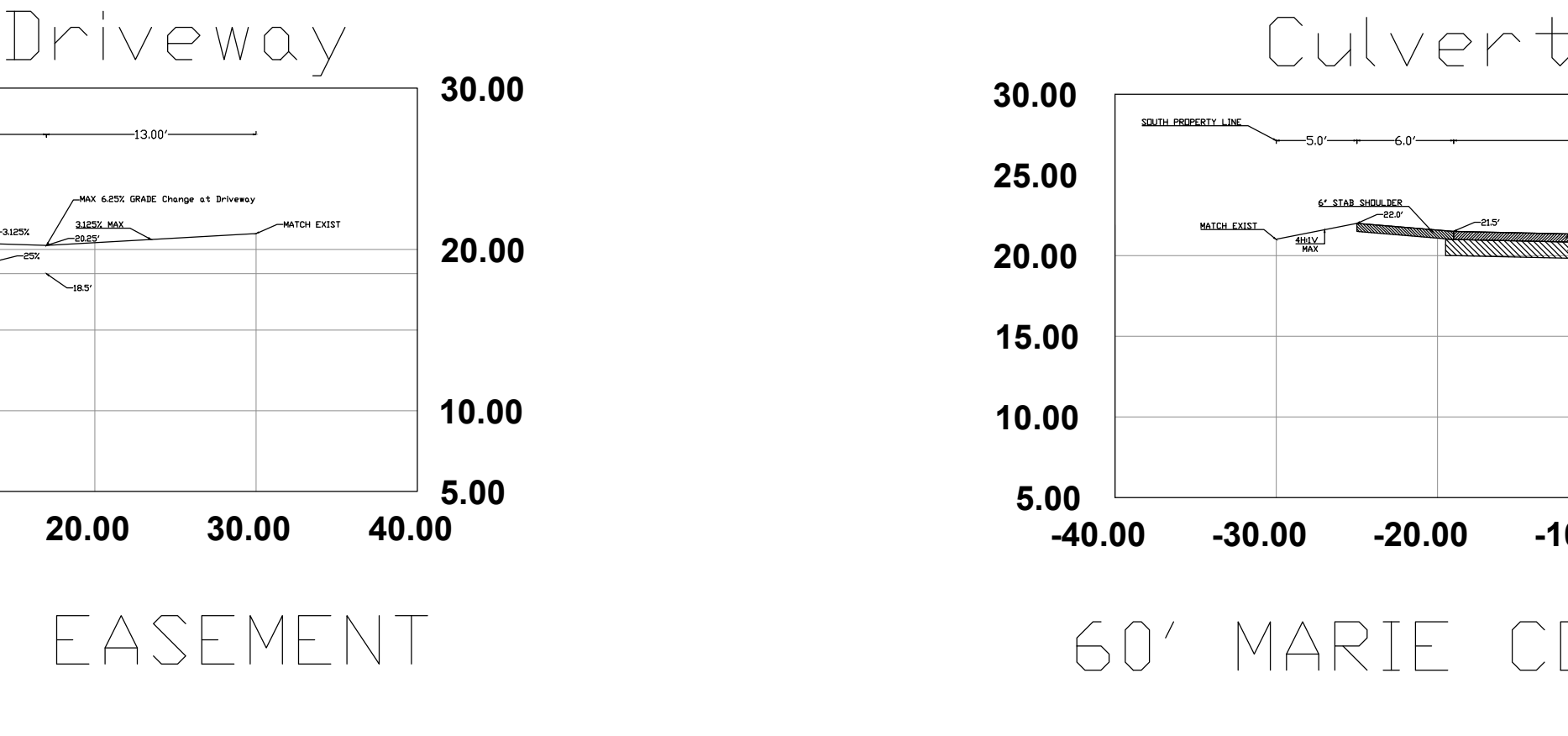
DRIVEWAYS LOUISE ST  
 Culvert Driveways



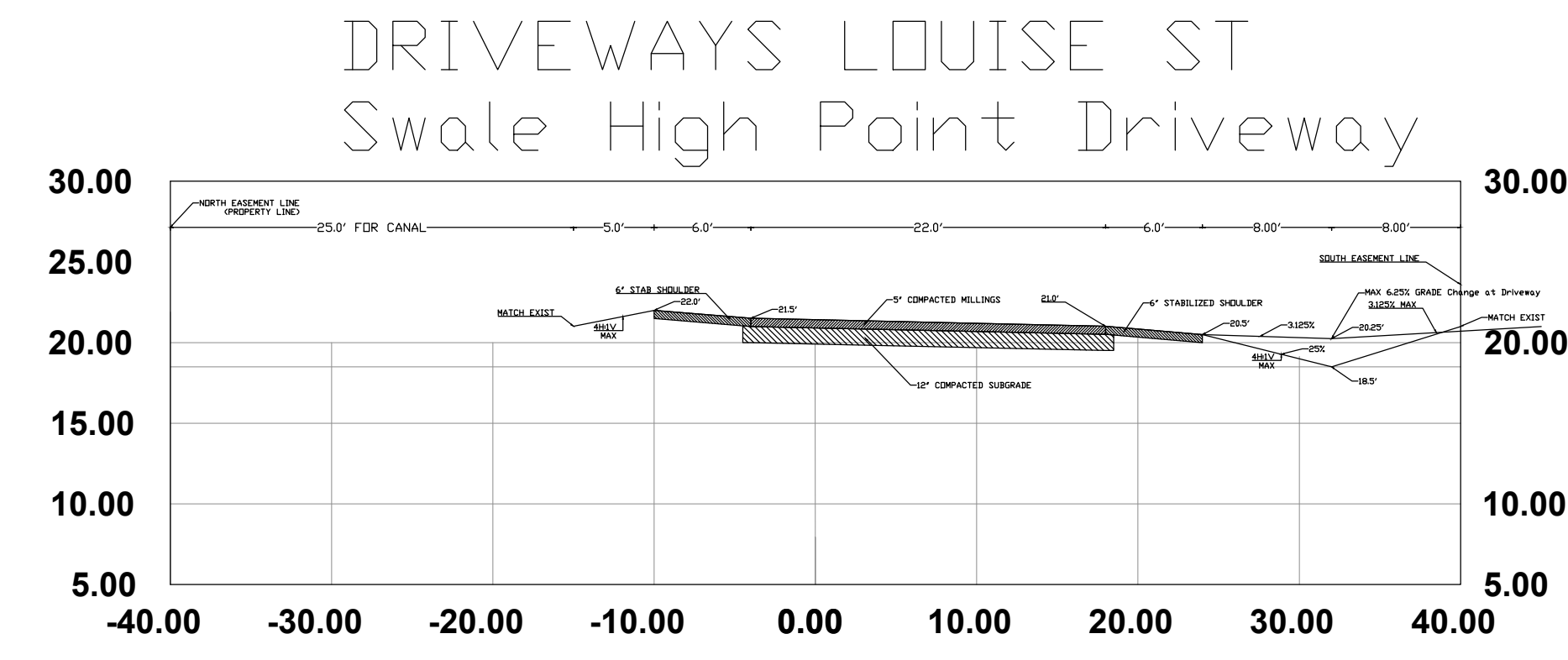
DRIVEWAYS DENNIS ST  
 Culvert Driveways



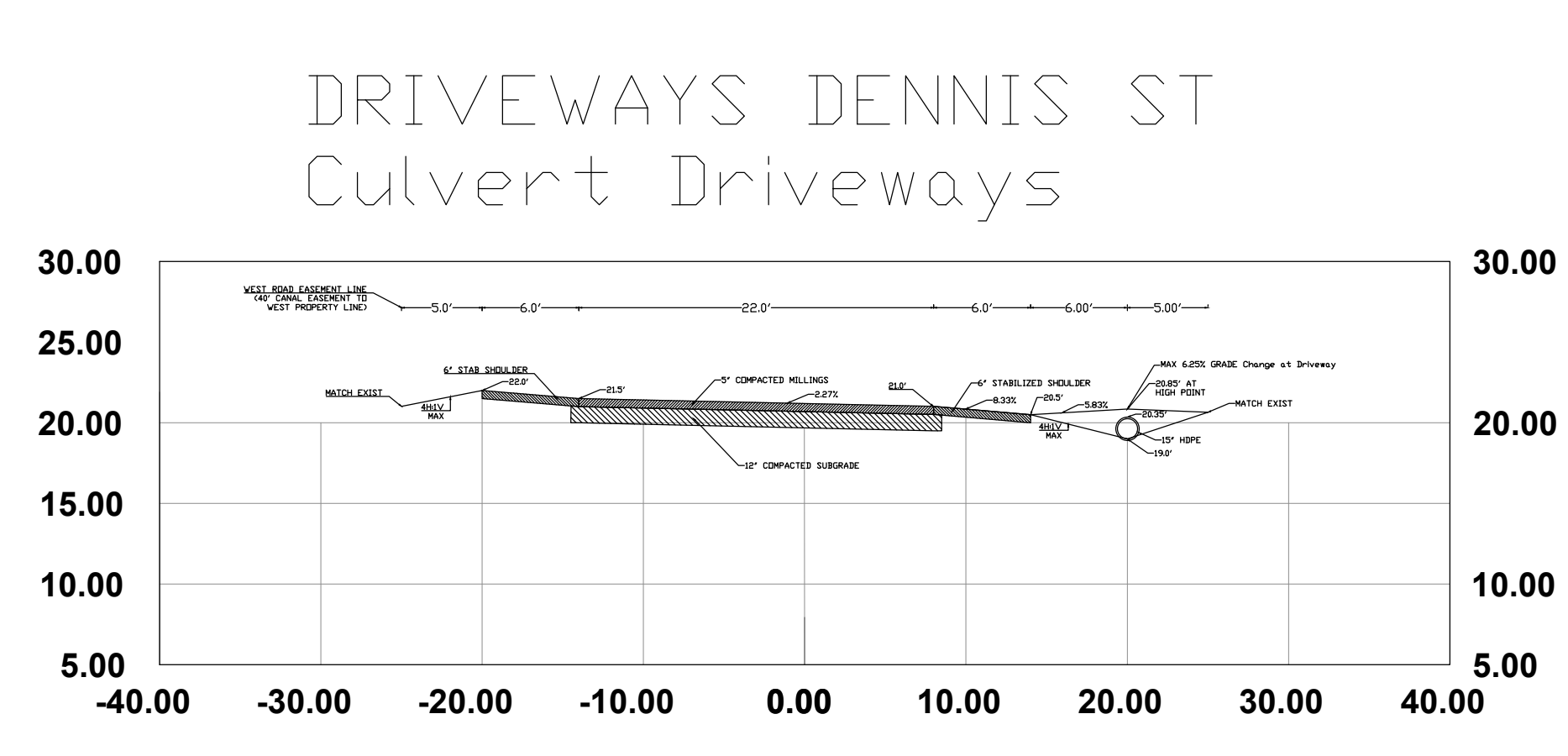
DRIVEWAYS CAROL ST  
 Swale High Point Driveway



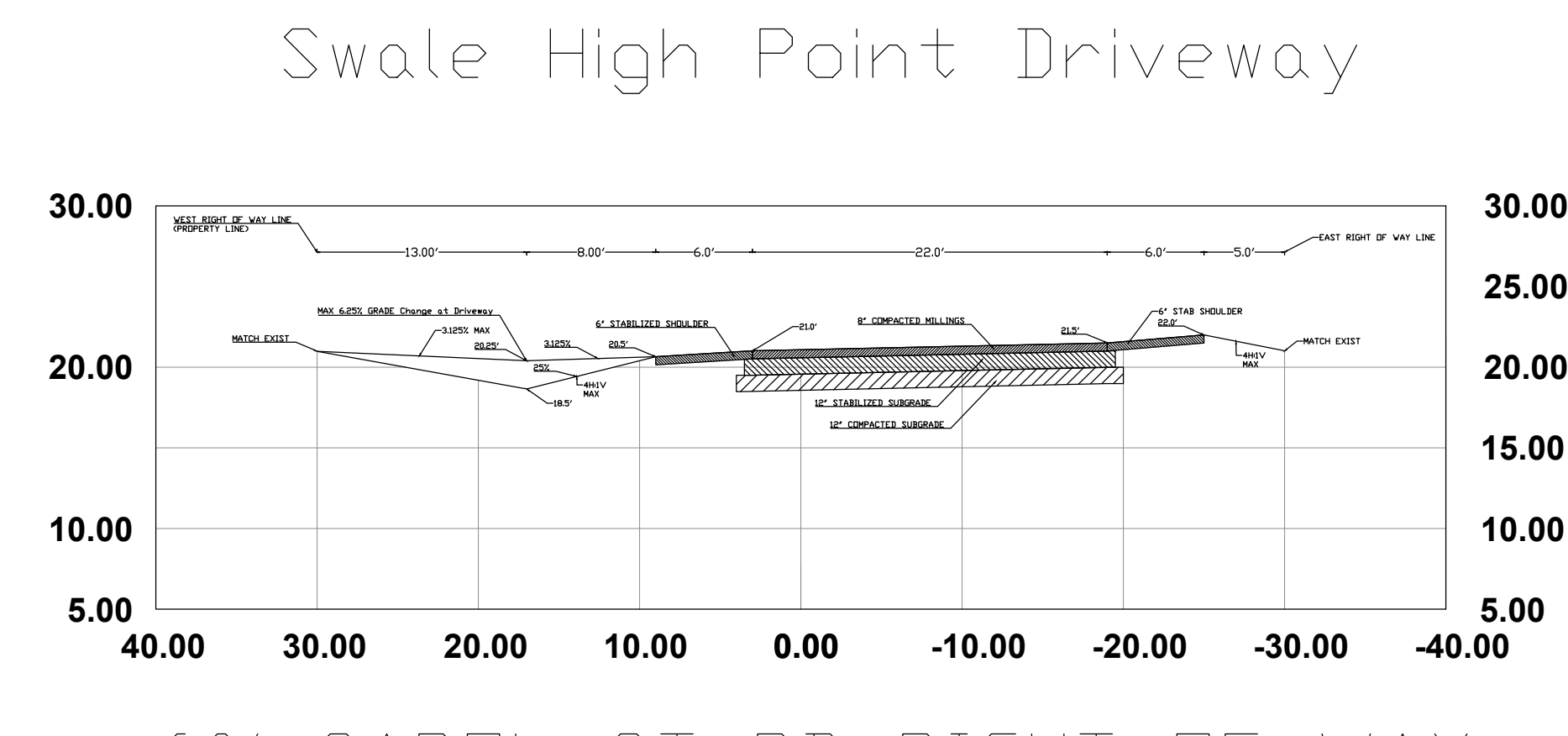
DRIVEWAYS MARIE COURT  
 Swale High Point Driveway



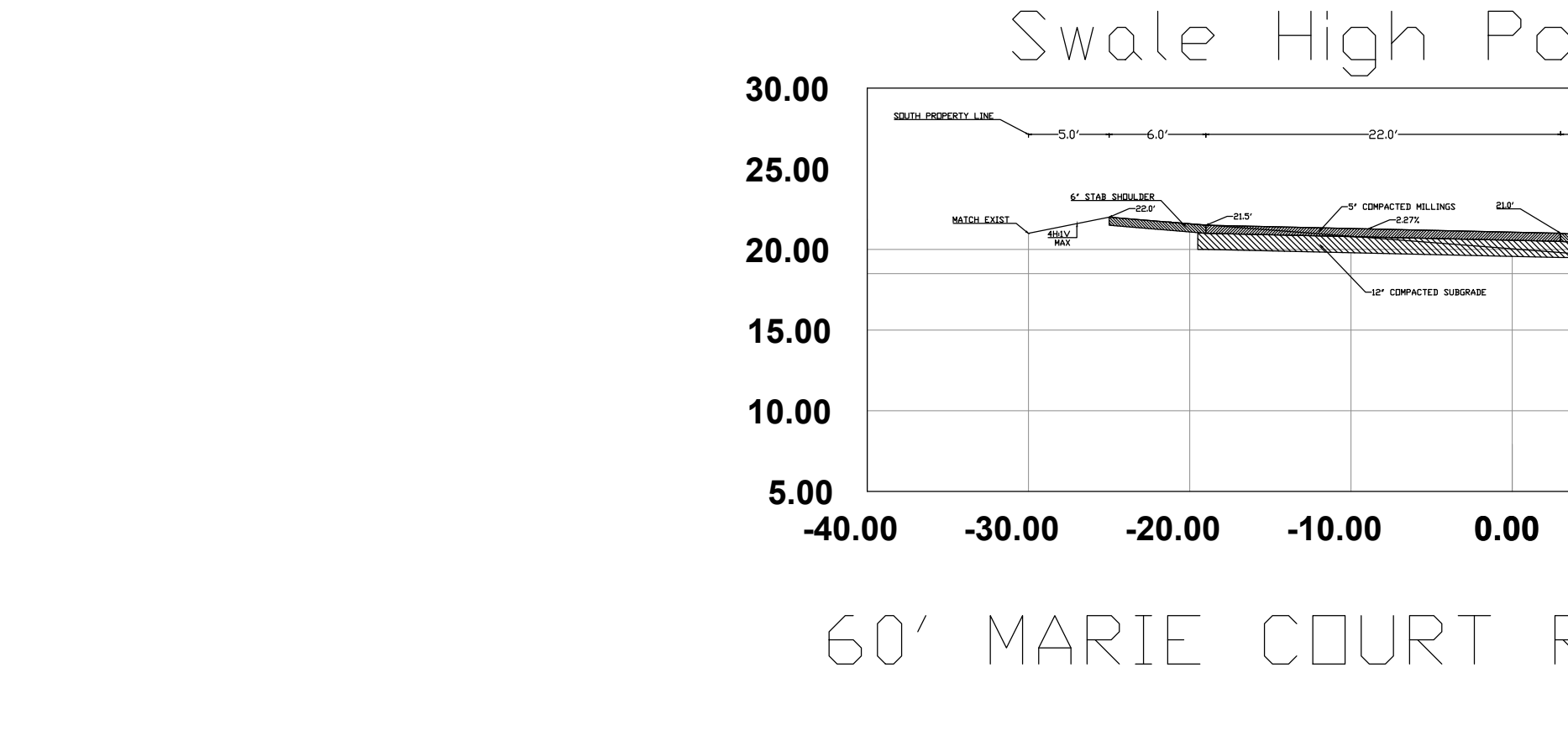
DRIVEWAYS LOUISE ST  
 Swale High Point Driveway



DRIVEWAYS DENNIS ST  
 Swale High Point Driveway

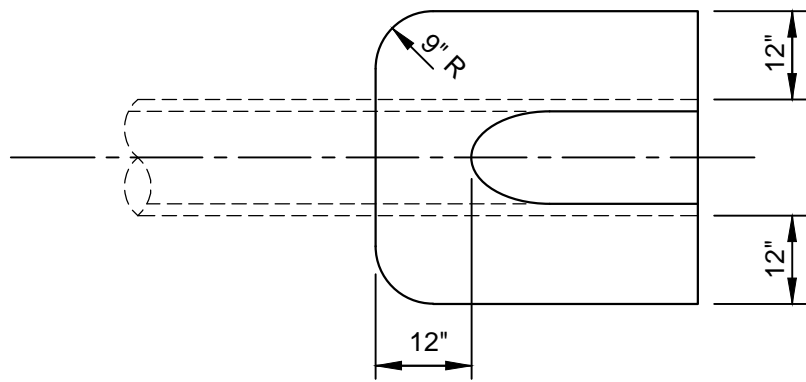


DRIVEWAYS CAROL ST  
 Swale High Point Driveway

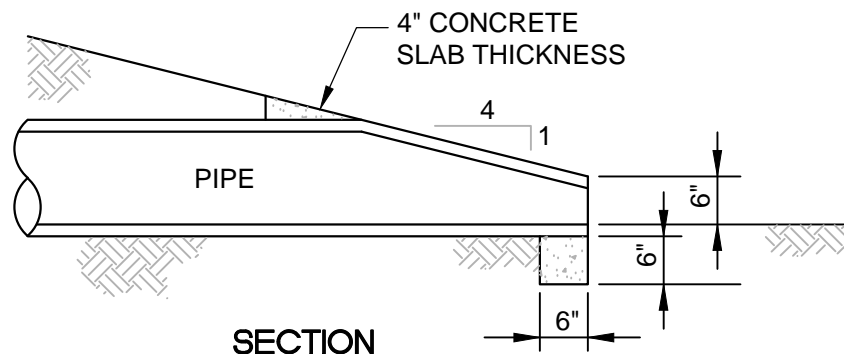


DRIVEWAYS MARIE COURT  
 Swale High Point Driveway

SW19 - July 11/17/2023 9:33 AM SRG-Pump Sta. Xsecs.dwg



TOP VIEW



SECTION

CONCRETE MITERED END SECTION